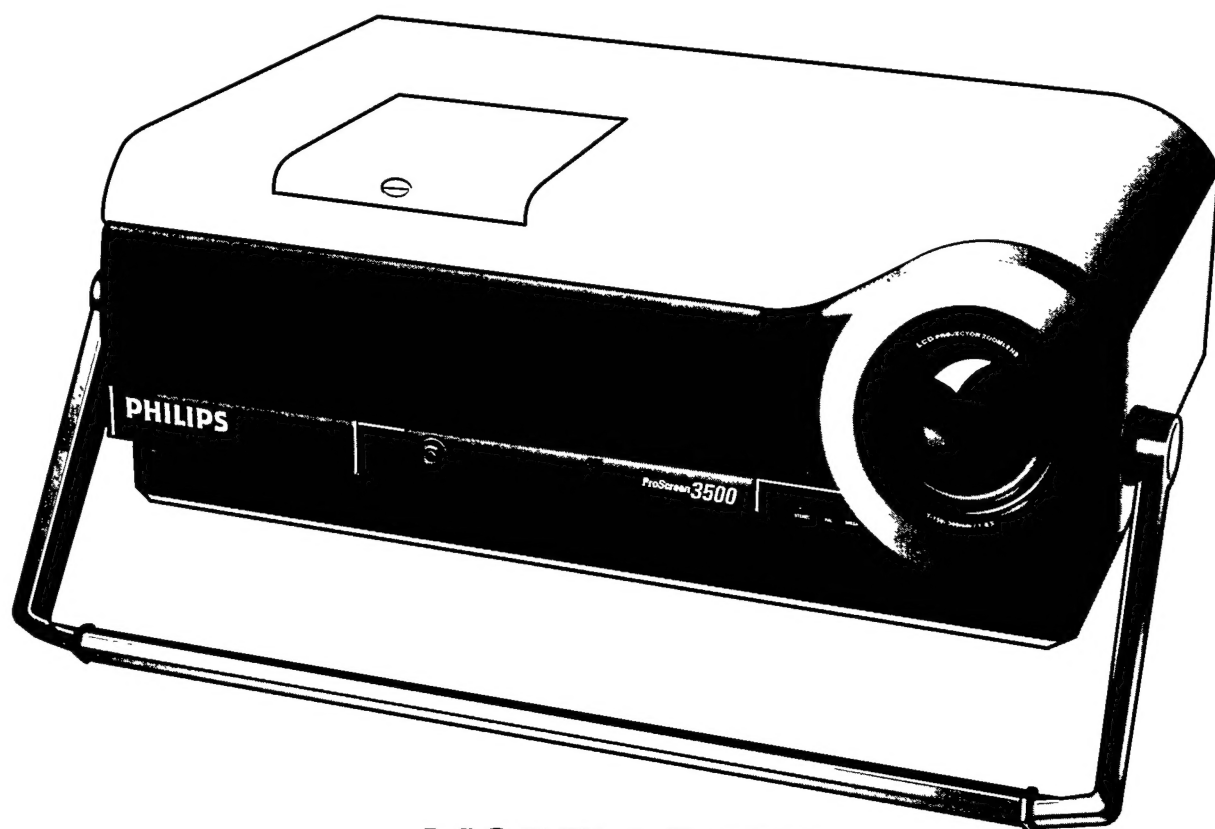


# PHILIPS



## DATA/VIDEO PROJECTOR OWNER'S MANUAL



MODEL LC 3500

# PHILIPS



PLEASE SEE INSIDE COVER  
FOR 3 IMPORTANT STEPS  
TO TAKE BEFORE  
OPERATING YOUR  
NEW PROJECTOR



**Return your Warranty Registration Card today  
to ensure you receive all the benefits you're entitled**

Once your PHILIPS purchase is registered, you're eligible to receive all the privileges of owning a PHILIPS product. So complete and return the Warranty Registration Card enclosed with your purchase at once. And take advantage of these important benefits.

■ **Warranty  
Verification**

Registering your product within 10 days confirms your right to maximum protection under the terms and conditions of your PHILIPS warranty.

■ **Owner  
Confirmation**

Your completed Warranty Registration Card serves as verification of ownership in the event of product theft or loss.

■ **Model  
Registration**

Returning your Warranty Registration Card right away guarantees you'll receive all the information and special offers which you qualify for as the owner of your model.

**PHILIPS**  
Smart.Very smart:

**Congratulations on your purchase,  
and welcome to the 'family'!**

**Dear MAGNAVOX product owner**

Thank you for your confidence in PHILIPS. You've selected one of the best-built, best-backed products available today. And we'll do everything in our power to keep you happy with your purchase for many years to come.

As a member of the PHILIPS 'family', you're entitled to protection by one of the most comprehensive warranties and outstanding service networks in the industry.

What's more, your purchase guarantees you'll receive all the information and special offers for which you qualify, plus easy access to accessories from our convenient home shopping network.

And most importantly you can count on our uncompromising commitment to your total satisfaction.

All of this is our way of saying welcome and thanks for investing in a PHILIPS product.

Sincerely,

Robert Minkhorst  
President and Chief Executive Officer

**P.S. Remember, to get the most from your MAGNAVOX product, you must return your Warranty Registration Card within 10 days. So please mail it to us right now!**

**HURRY!**  
Registration  
Needed  
Within  
10 Days

**Know these safety symbols**



⚡ This 'bolt of lightning' indicates uninsulated material within your unit may cause an electrical shock. For the safety of everyone in your household, please do not remove product covering.

⚠ The 'exclamation point' calls attention to features for which you should read the enclosed literature closely to prevent operating and maintenance problems.

**WARNING: To prevent fire or shock hazard, do not expose this equipment to rain or moisture.**

**CAUTION:** To prevent electric shock, match wide blade of plug to wide slot, and fully insert.

**For Customer Use**

Enter below the Serial No. which is located on the rear of the cabinet. Retain this information for future reference.

Model No. \_\_\_\_\_

Serial No. \_\_\_\_\_

# TABLE OF CONTENTS

## Getting Started

Warning/Precautions .....	2
How your Projector works .....	4
Description of Projector Controls .....	5
Description of Remote Control .....	8
Setting-up the Projector + Screen .....	10
Audio connections	
External speakers, Audio Output Jacks,	
Personal computer .....	13
Basic Projector Operation .....	14
Zoom and Focus .....	15

## On-Screen Features

* How to Use On-Screen Menus .....	16
AUDIO Control Adjustments	
* Bass, Treble, Balance .....	18
* Stereo .....	19
* Expand .....	20
VIDEO Control Adjustments	
* Bright, Contrast, Color, Tint, Sharp .....	21
INPUT Tuning Control Adjustments	
* Picture Source - AUX 1, AUX 2 & AUX 3 .....	23
* Picture Source - S-Video .....	24
DATA INPUT Control Adjustments	
* To select Data Input .....	25
FEATURES Control Adjustments	
* Personal Preferences .....	27
* Autostart .....	29
LENS CONTROL with remote	
* Zoom .....	30
* Focus .....	30

## DATA MENU Control Adjustments

* Image - Phase, Brightness, Contrast .....	31
* Audio - Bass, Treble, Balance, Sound Mode, Expand ...	32
* Setup - Hor. position, Vert. position,	
Personal Preference, Curtain, Computer Ident. ....	33
* Data exit .....	34

## Remote Control Operation

* Timer .....	35
* Closing/Opening Curtain .....	36
* Direct Access .....	36

## Replacing the Lamp

.....	37
-------	----

## General Information

Tips if something isn't working .....	39
Technical Specifications .....	40
Glossary of Terms .....	41
Warranty .....	42

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

**WARNING: TO PREVENT FIRE OR SHOCK HAZARD DO NOT EXPOSE THIS UNIT TO RAIN OR EXCESSIVE MOISTURE.**

The Model and Serial Numbers are found on the back of this Projector. Please record these numbers and purchase date in the space below. Refer to them whenever you ask your dealer about this Projector.

Model No. ....  
Serial No. ....  
Purchase Date .....

Please attach your sales receipt to this book and keep it for future reference.

# HOW YOUR PROJECTOR WORKS

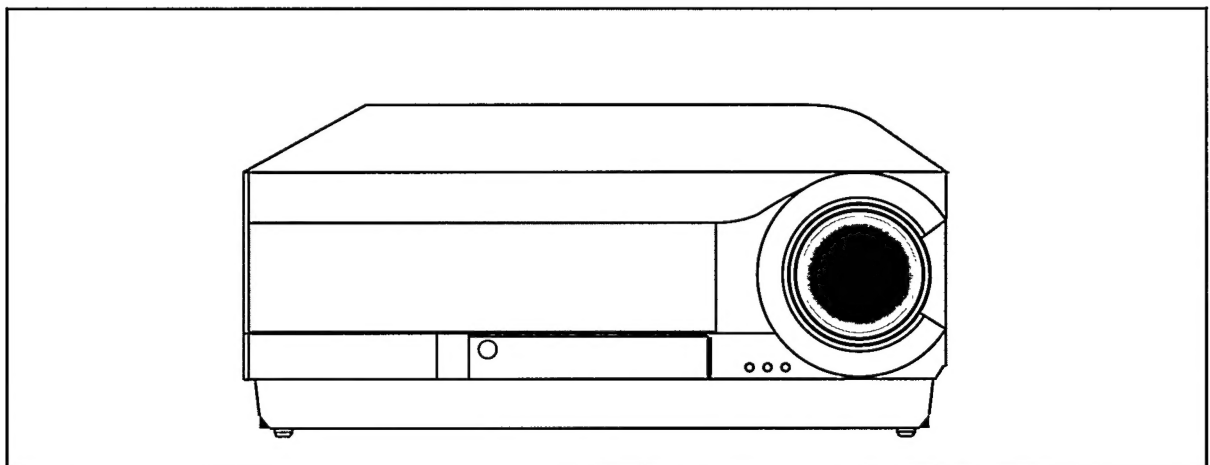
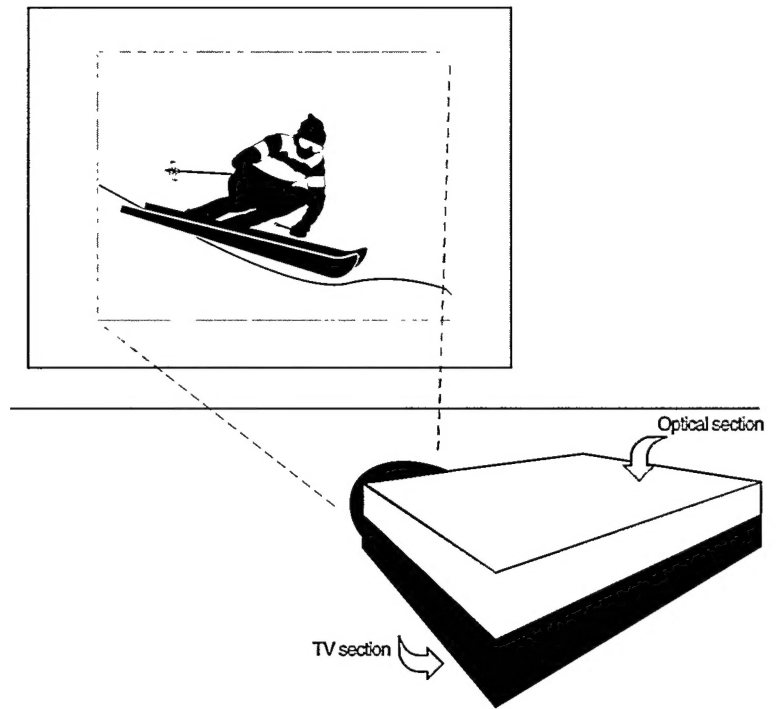
**Y**our Projector is a compact unit which enables you to project large pictures onto screens, just like a slide or movie projector.

Inside your Projector are two main sections:

- the Electronic section which handles the signals coming from your computer or video source
- the Optical section which projects the pictures onto your screen.

The picture is built up inside the projector on three Liquid Crystal panels, one for each of the three primary colors (red, green and blue). The optical system combines these into one high-quality, full-color picture which is then projected onto your screen.

The Projector uses a zoom lens so you can easily change the picture size to fit your screen.



## FEATURES

**Compact Projector with 2x zoom lens,** giving pictures from 40 to 140 inches wide. Zoom and focus manually and via remote control.

**Liquid Crystal Display panels** for high quality pictures. Long life metal Halide Lamp. Multi beam light collection for excellent corner brightness.

**On-Screen graphics display** for feature controls such as channel programming, timer settings, and color adjustments.

**Infrared Remote Control** operates your Projector and VCR.

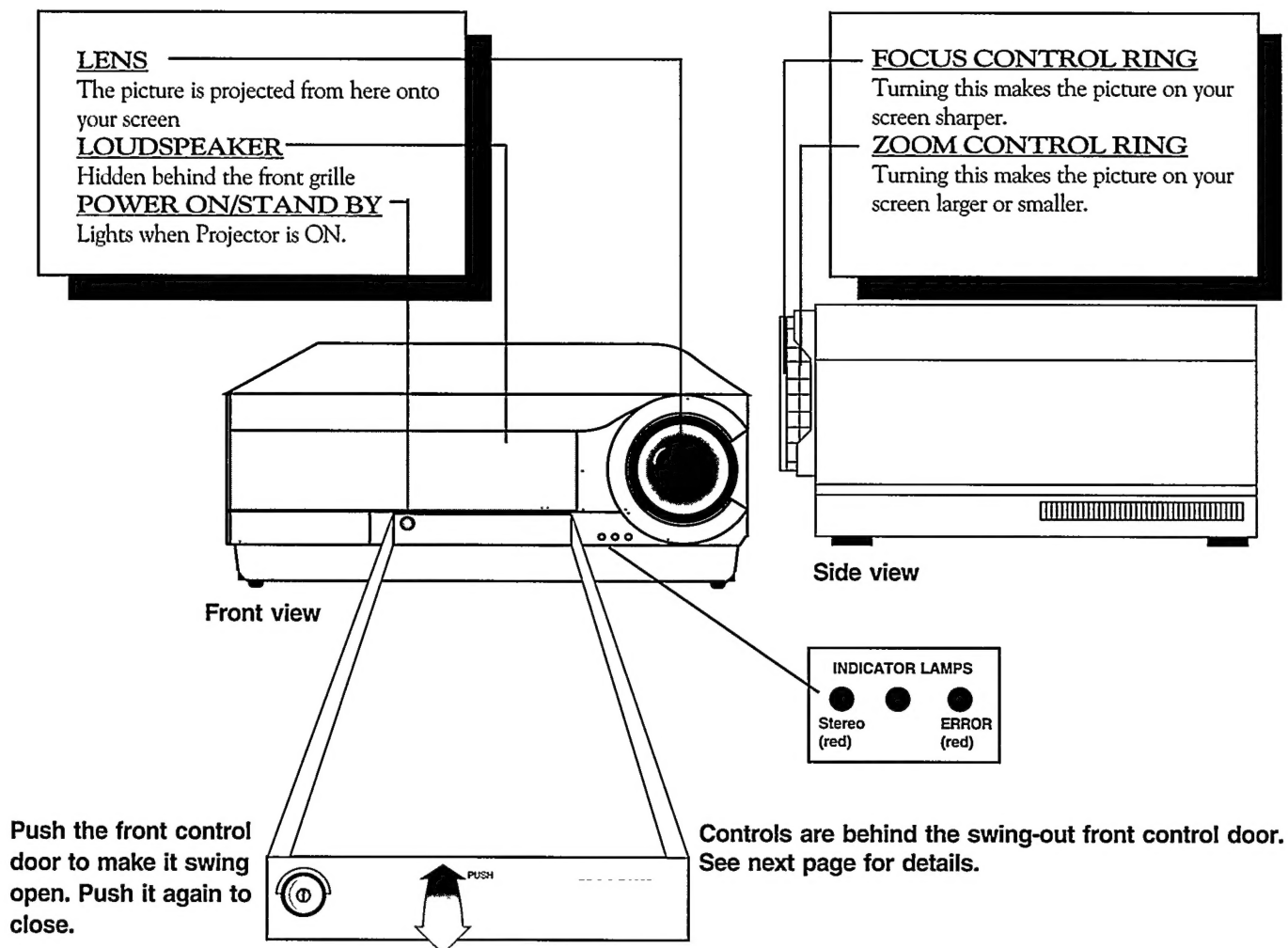
**Stereo-Ready** for receiving transmissions in stereo sound. Internal, monaural speaker. Connects to audio hi-fi systems for stereo sound.

**Audio/Video jackpanel** for direct connections of accessories such as VCRs.

## RGB Inputs

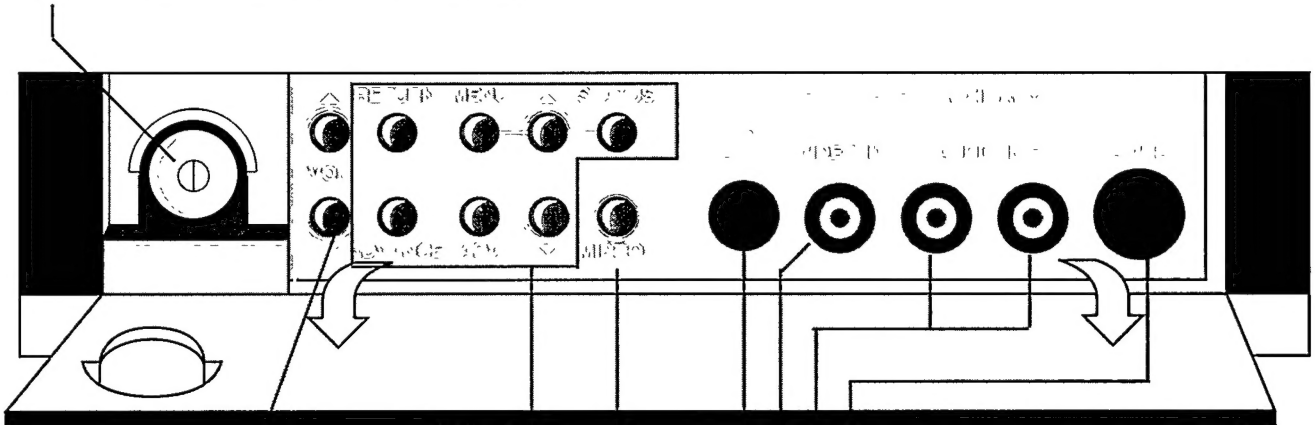
**Timer** which automatically turns the Projector OFF after a preset time period.

## GETTING STARTED - PROJECTOR CONTROLS



## Projector Front Panel Buttons and Jacks

### POWER ON / STAND BY BUTTON



### VOLUME ▲(UP), ▼(DOWN) BUTTONS

Press to adjust the Projector sound level.

### MENU BUTTONS

Press the MENU button to display On-Screen feature controls.

Press ADVANCE or RETURN to move through the list of On-Screen features.

Press ▲ to get a menu of a selected On-Screen feature.

Press ▲ and ▼ to adjust the menu item selected.

In Menu mode, press STATUS (EXIT) to switch On-Screen displays OFF.

In normal mode, press STATUS (EXIT) once to get short display of settings, twice to get long, more detailed display.

### S-VHS (AUX 3)

Jack for S-VHS, Video input from VCR or camcorder.

### AUDIO JACKS

L(ef) jack for left-channel audio input.

R(ight) jack for right-channel audio input.

### VIDEO IN (AUX 3)

RCA Jack for VCR or camcorder.

### HEADPHONES " 1/8 " "

Jack for headphones (6,3 mm).

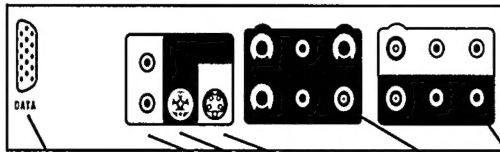
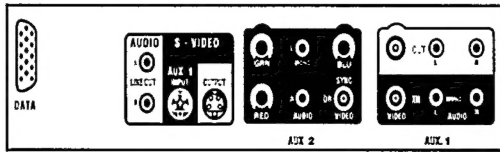
You can switch off the internal speaker with the INTERNAL/EXTERNAL speaker switch on the back of the Projector (See page 7).

### MIRROR

This button controls an internal electronic "mirror" which determines how the picture appears on your screen. You only need to use this control when you want to use the Projector with a rear projection screen or mirror. Each time you press the button it changes the orientation of the picture on your screen (See page 11).

The Projector 'remembers' its last setting.

## Projector Back Panel



### DATA

Use this connector (Sub-D) to connect a personal computer (VGA or Macintosh input). See page 25 for details. Connect the audio (R+L, or mono) to the RCA jacks of AUX 2.

### AUDIO

The selected audio signal is output here for connection to an external audio amplifier. (Not remote controlled)

### S-VHS INPUT

Plug your S-VHS VCR or camcorder in here (See page 24 for details).

### S-VHS OUTPUT

Loop output of S-VHS input.

### AUX 1 & 2

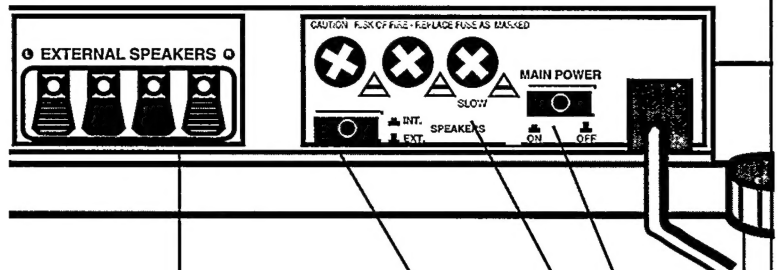
Use these connectors for external equipment such as a VCR or CDV (Compact Disc Video) (See page 23).

### AUX 1

Use these connectors (BNC) to connect the video from (or to) external equipment such as a VCR or CDV (Compact Disc Video). Connect the audio (R+L, or mono) to the RCA jacks.

### AUX 2

Use these connectors (BNC) to connect an RGB video source. Connect the audio (R+L, or mono) to the RCA jacks. At sync/video input also VCR or CDV connection is possible. For RGB this input is for the synchronization.



### EXTERNAL SPEAKERS

Connect your external speakers here (See page 13).

### INTERNAL/EXTERNAL SPEAKER SWITCH

Press to play sound through your external speaker connections. The Projector speaker is OFF in this position. Press again to listen to sound from the Projector speaker.

### FUSES

Not user serviceable. Fuses should only be replaced by your dealer or service organization.

### MAIN POWER

The Projector can be turned on or off, using the Projector Power button on the remote control or the POWER ON/STAND BY button on the front. Press MAIN POWER to cut off power to the Projector completely. In the OUT position, you cannot switch on the Projector using the remote or the POWER ON/STAND BY button on the front panel.

### HEIGHT ADJUSTING FEET

Turn these to tilt the Projector downwards (See page 10 for details).

# REMOTE CONTROL UNIT

## VCR BUTTONS

For use of VCR (Video Cassette Recorder) buttons see "Remote Control Operation of a VCR" on page 9.

## VCR POWER BUTTON

Press to turn VCRs ON and OFF.

## MENU BUTTONS

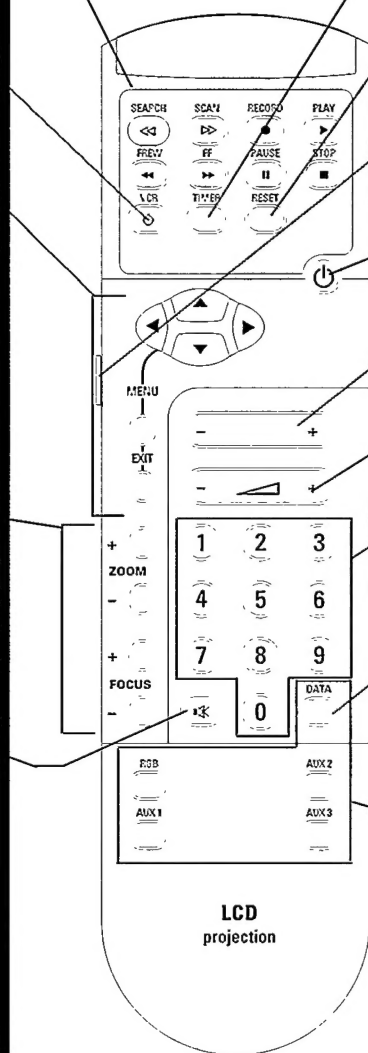
Press the MENU button to display On-Screen feature controls. Press ▲ or ▼ buttons to move forward and backward through the list of On-Screen items. Press ◀ or ▶ to select an On-Screen item and adjust settings. Press the EXIT button to clear the screen after control adjustments. Also press the EXIT button to see the current channel number or source on the projector screen.

## ZOOM AND FOCUS BUTTONS

Press ZOOM +/- to control ZOOM. Press FOCUS +/- to control FOCUS. You can enable/disable the zoom and focus controls using the LENS CONTROL menu (See page 27).

## MUTE BUTTON

Press to turn the sound of the projector OFF. Press again to return the sound to its previous level.



## TIMER BUTTON

Set the Projector to turn itself OFF automatically (See page 35 for details).

## RESET BUTTON

Selection of 4 personal preference settings and one Factory preset.

## PROJECTOR/VCR SWITCH

Press to operate a VCR. Do not press to operate the projector.

## PROJECTOR POWER BUTTON

Press to turn projector ON and OFF.

## BRIGHTNESS BUTTON

Press to adjust the brightness level.

## VOLUME BUTTON

Press to adjust the sound level.

## NUMBER BUTTONS

Press these buttons to select items in the menu's.

## CURTAIN BUTTON

When the projector is in the DATA INPUT mode, press DATA to blank the projector picture with a pre-defined curtain (see page 33 for details).

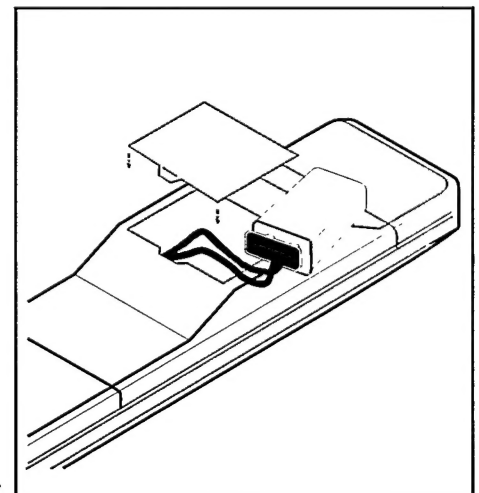
## DIRECT ACCESS BUTTONS

Press to select one of the external input sources. Direct access is not possible when the menu is activated.

To load the supplied (9 Volt) battery into the remote:

### BEGIN

- 1 Remove the battery compartment lid on the back of the remote.
- 2 Place the battery in the remote. Be sure to line the (+) and (-) ends of the battery up correctly.
- 3 Reattach the battery lid.




Bottom of remote control unit



# REMOTE CONTROL OPERATION OF A VCR

1 Press the Projector-VCR switch.

2 Point the front of the remote towards the front of the VCR (remote sensor window) when pressing buttons.

 Remember. The VCR function buttons on the Projector remote will not operate your VCR if it does not have those features.

## SCAN BUTTON

In playback mode, hold the SCAN button to view picture moving rapidly forward.

## SEARCH BUTTON

In playback mode, hold the SEARCH button to view picture moving rapidly in reverse.

## REW(IND) BUTTON

Press to rewind tapes. For some VCRs you may need to press the STOP button first, then REWIND.

## VCR POWER BUTTON

Press to turn the VCR ON and OFF.

## PROJECTOR-VCR SWITCH

Press to operate the VCR. Do not press to operate the projector.

## FF (FAST FORWARD) BUTTON

Press to rapidly advance the tape. For some VCRs you may need to press STOP first, then FF.

## RECORD BUTTON

Hold the RECORD button down and then press the PLAY button to begin a VCR recording.

## PLAY BUTTON

Press to playback a tape. Hold down after pressing the RECORD button to start a recording.

## STOP BUTTON

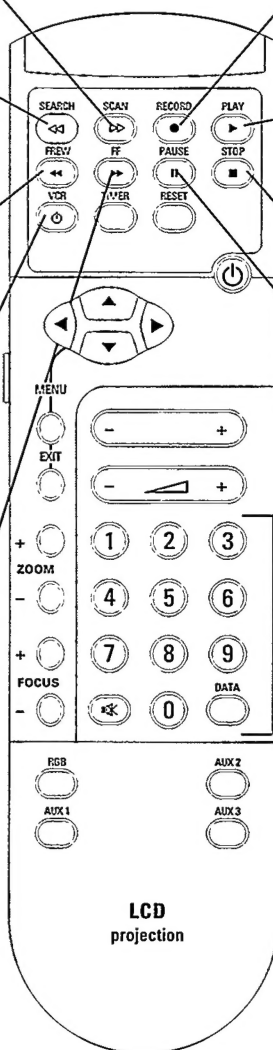
Press to stop the tape.

## PAUSE BUTTON

Press to temporarily stop the tape during a playback or recording. Press again to release PAUSE.

## NUMBER BUTTONS

Press buttons for direct VCR channel selections or menu items.



**P**roper installation of your Projector will ensure that you make the most of the set's features. Read all of pages 10 through 14 carefully before starting to install your Projector.

## 1) Choose the screen position

You get maximum picture contrast when the least ambient light falls on the screen. Place the screen where light from windows, room lighting etc. does not disturb the picture.

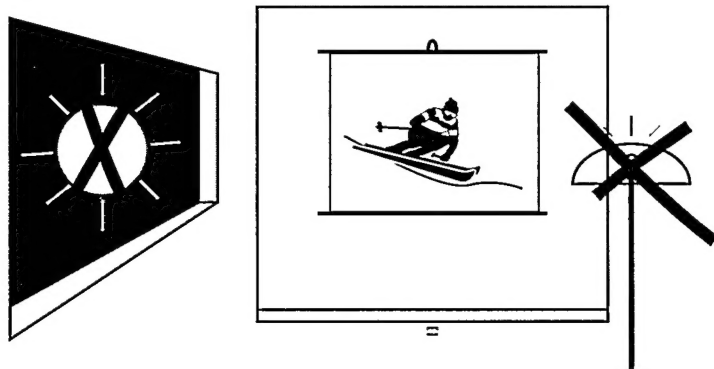
## 2) Choose the Projector position

Ideally, the Projector should be located at about the same height from the floor as the top of the screen and directly in front of it.

The Projector can be placed on a wall-mounted shelf (minimum size 17 x 24 inches), a cabinet top, or a rack can also be used. Make sure you can hide the cables connected to the set.

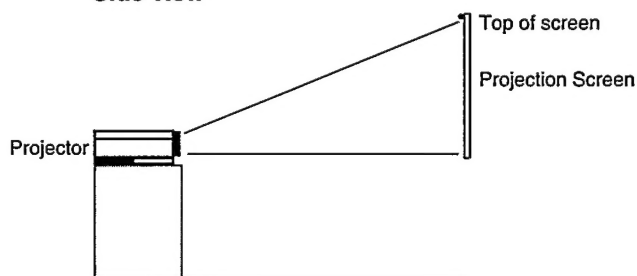
The Projector has adjustable feet at the rear. Turn these if you need to point the Projector downwards to the screen.

## 1. LIGHTING

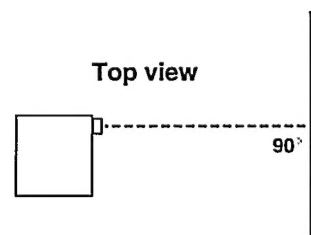


## 2. MOUNTING

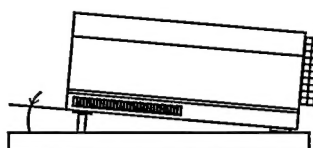
### Side view



### Top view



### Side view



Height Adjusting Feet



(Continued on next page)

# GETTING STARTED - SETTING UP THE PROJECTOR + SCREEN (CONTINUED)

If you cannot put the Projector at the same height as the bottom of the screen, but rather lower, you have two choices:

2A. The front of the Projector can be tilted upwards; the picture will not then be perfectly rectangular when the screen hangs vertically. This is called the "keystone" effect.

By pushing the sides of the handle it can be turned.

Now the handle can be used for lifting the front of the projector.

The handle can also be removed by removing the caps in the sides. The holes appearing can be closed with the supplied caps.

The projector has adjustable feet at the rear. Turn these if you need to point the projector downwards to the screen.

Note: The Projector should not be tilted up or down more than 15 degrees from its normal horizontal position.

2B. If you want to use the Projector with a rear projection screen or in a ceiling mount (Projector positioned upside down), you will need to change the internal mirror. You do this using the button marked MIRROR which is behind the swing-out control door on the front panel. Each time you press MIRROR, the picture on the screen changes orientation.

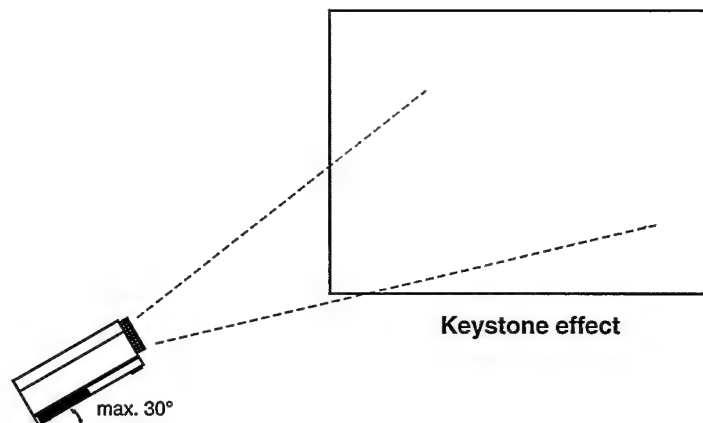
## 3) Choose the size of screen

Choose a screen size that fits the planned seating capacity and room dimensions.

A good guide is:

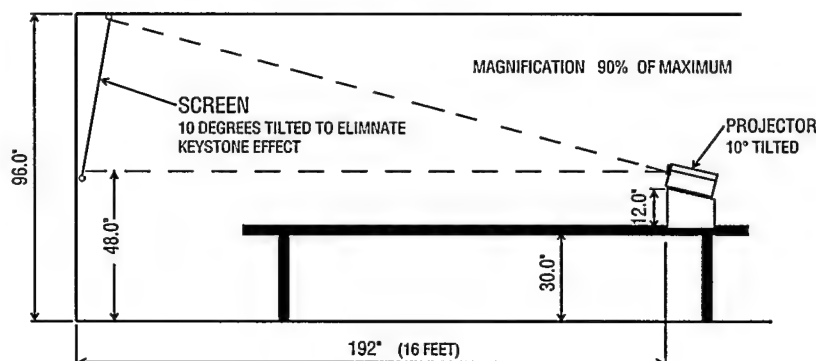
\* Two times the screen width should equal the distance from the screen to the front row of seats

\* Six times the screen width should equal the distance from the screen to the back row of seats.



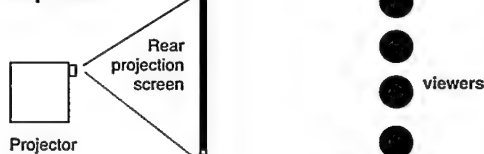
## 2A. TILTING

### SAMPLE SET-UP FOR TABLE TOP USE



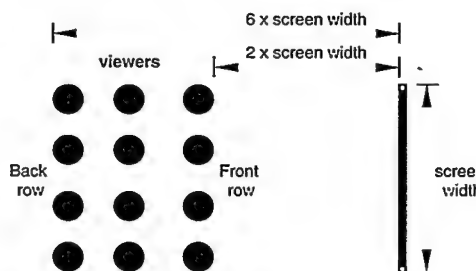
## 2B. REAR PROJECTION

### Top view



## 3. CHOOSING THE SCREEN SIZE

### Top view



Your Projector has a 2x zoom lens. This means that the picture you get on the screen at maximum magnification is twice as big as that projected at minimum magnification. For example, at a distance of 22 feet you get a 100-inch picture on the screen at full magnification. You can use the zoom lens to reduce this to 50 inches at minimum magnification.

If you want a picture size of 100 inches, the Projector can be between about 22 and 44 feet from the screen. Choose a screen and projection distance in the middle of the zoom range (mid-range magnification). This gives the best picture quality and means you can fit the picture exactly to your screen by zooming in or out a little.

The table alongside shows you typical picture sizes at various distances. More information is given in the "Technical Specification" on page 40.

### 3) Choose the type of screen

Choose the type of screen-mount you prefer (stand type, wall-mount, pull-down etc).

Choose a screen with a width to height ratio of 4:3 (aspect ratio of 1.33) to match the NTSC picture format. A black masking border around the screen will give a crisp rectangular picture.

The picture appears brightest (highest gain) when you sit directly in front of it and gets dimmer as you move to the sides. Try to keep the viewing angle as narrow as possible for most viewers.

Choose the type of screen surface best suited to your room and viewing conditions:

**Pearlescent** - highest gain, narrow viewing angles.

**Silver lenticular** - medium gain, wide viewing angles. This type of screen is not recommended.

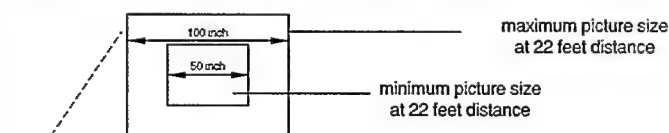
**Matt white** - wide viewing angles, needs darkened room.

**Polarized** - By using this type of screen, the contrast in a light environment can be improved.

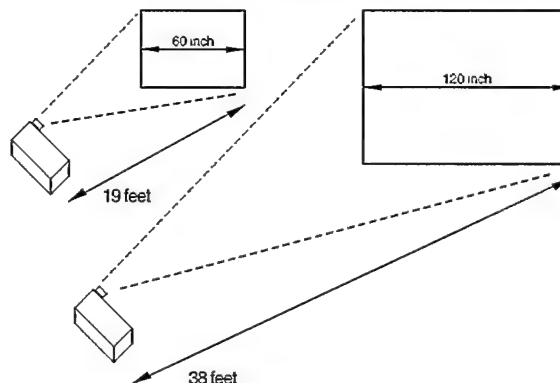
If in doubt, consult your dealer on the best choice of screen for your room.

## MAGNIFICATION

### Maximum and minimum magnification (examples)



### Mid - range magnification (examples)



	Distance from Projector to screen (in feet)		
Picture width in inches	Maximum magnification	Mid-range magnification	Minimum magnification
40	9	13	18
60	14	19	26
80	18	25	35
100	22	31	44

Larger picture sizes can be reached by putting the Projector at a greater distance.

For best results, choose your screen and projection distance using mid-range magnification of the zoom lens.

# GETTING STARTED - AUDIO CONNECTIONS

## EXTERNAL SPEAKERS

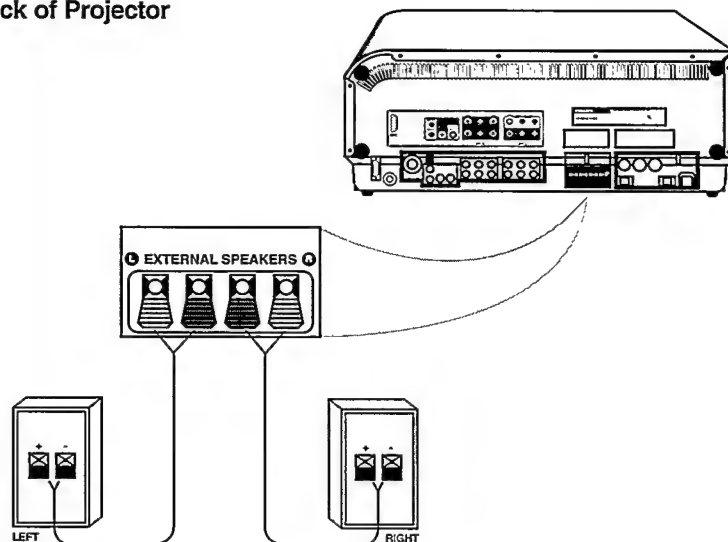
**Y**ou can connect external speakers to enjoy stereo sound.

### BEGIN

- 1 Connect external speakers to the speaker wire terminals on the Projector. Speakers: 8 ohm, 10 watt minimum.
- 2 Turn Projector on. Select AUDIO Menu and place the Projector in the STEREO mode (See page 19).
- 3 Place the speakers so you enjoy good stereo sound.

### STOP

## Back of Projector



External Speakers


## AUDIO OUTPUT JACKS

**T**he AUDIO OUT(put) jacks on the rear of the Projector may be used to play the sound of the connected signal through an audio hi-fi system.

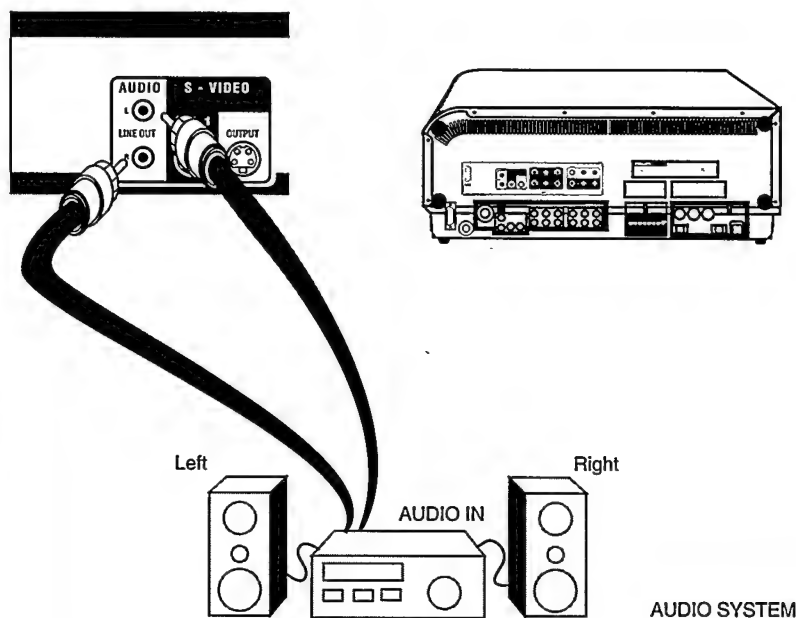
### BEGIN

- 1 Connect the R(ight) and L(eft) AUDIO OUT(put) jacks on the Projector to the R and L AUDIO IN(put) jacks on your amplifier or sound system.
- 2 First turn your Projector on; then your audio system. Adjust the sound level coming from the Projector with the audio amplifier VOLUME control.

### STOP

 Remember. The audio system may have to be in AUX mode to play the sound of the connected signal.

## Projector Back Panel



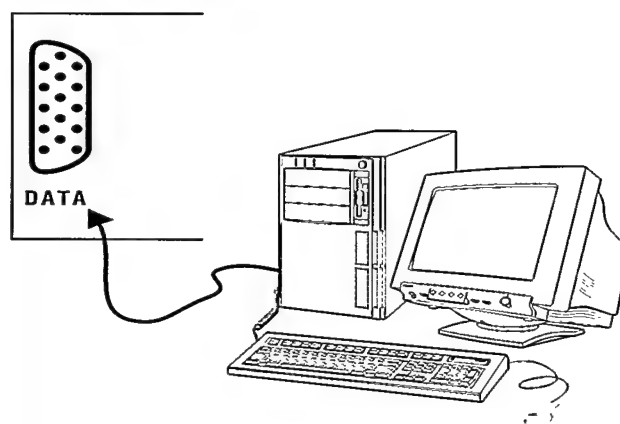
AUDIO SYSTEM

## PC (VGA OR MAC II-INPUT)

**Y**ou can connect a personal computer to display the computerscreens onto the Projector screen

- 1 First turn OFF your computer and Projector.
- 2 Use a Sub-D plug to connect your computer to the DATA input socket.
- 3 If available, connect the audio (R+L, or mono) to the RCA jacks of AUX 2 (See page 7).

## Computer Back Panel



# GETTING STARTED - BASIC PROJECTOR OPERATION

**Y**ou can operate your Projector using the controls on the set itself.

## BEGIN

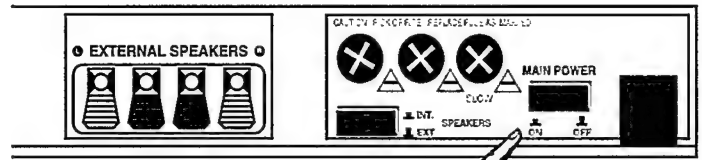
- 1 Press in the **MAIN POWER** button at the back of the set to turn the Projector ON.  
(For new sets this button is on).
- 2 Press the **POWER ON/STANDBY** button on the front of the Projector.  
A green light above the button lights up.
- 3 Press the **VOLUME ▲ (UP)** or **▼ (DOWN)** buttons to adjust the sound level.



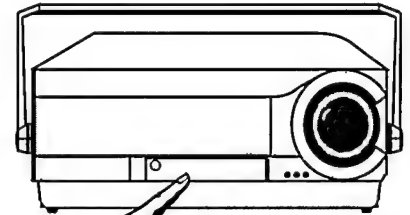
Remember. When you first switch on, the last-selected source is selected automatically and its number appears briefly on the screen. After that, just press the **STATUS** button to see what source is selected.

Remember. During starting of the set a 'sparking' noise may be heard. This is quite normal.

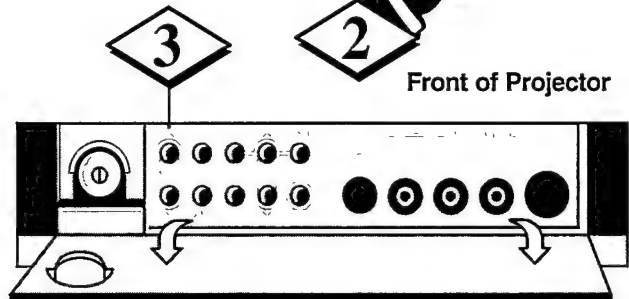
## Projector Back Panel



## Front of Projector



## Front of Projector



## TO SWITCH OFF

### BEGIN

Stand By:

- 1 Press the **POWER ON/STANDBY** button on the front of the Projector.



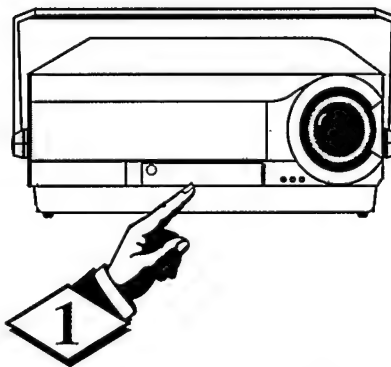
Completely off:

- 2 Press the **MAIN POWER** button (at the back of the Projector) so it goes to the OUT position.

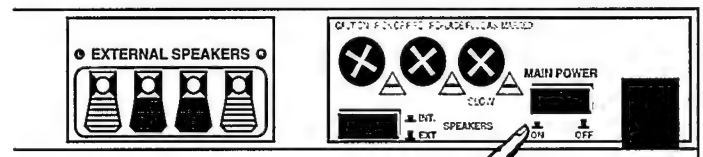


Remember. After switching off with the **POWER ON/STANDBY** button (or with the Remote) the cooling fan will run for a few more minutes. It is advised not to press the **MAIN POWER** button before the fan has stopped.

## Front of Projector



## Projector Back Panel



## MANUALLY

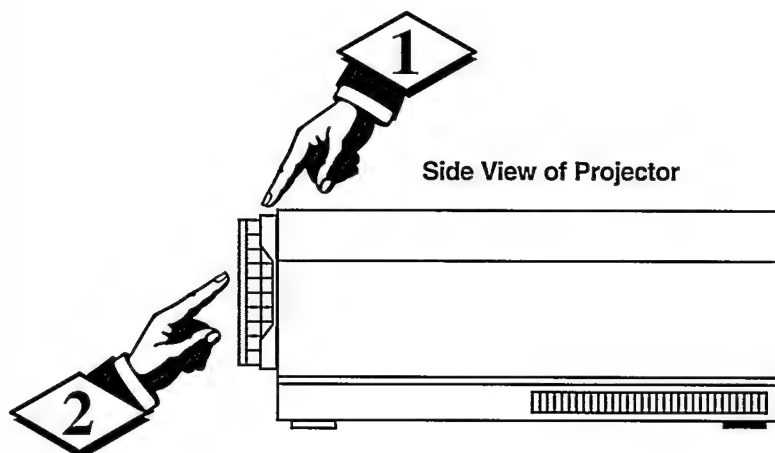
The zoom lens on your projector can be adjusted by hand to make the picture on the screen larger or smaller. It also has a focus control to make the picture sharp.

It is best to adjust the picture size first and then the focus.

### BEGIN

1 Turn the Zoom Control ring until the picture on the screen is the size you want.

2 Turn the Focus Control ring until the picture is sharp.



## USING THE REMOTE

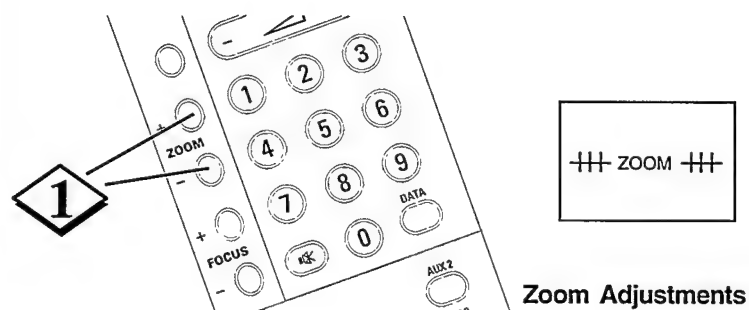
### BEGIN

1 Press one of the zoom buttons on the remote until the picture on the screen is the size you want. You will see the word "ZOOM" on the screen while you do this.

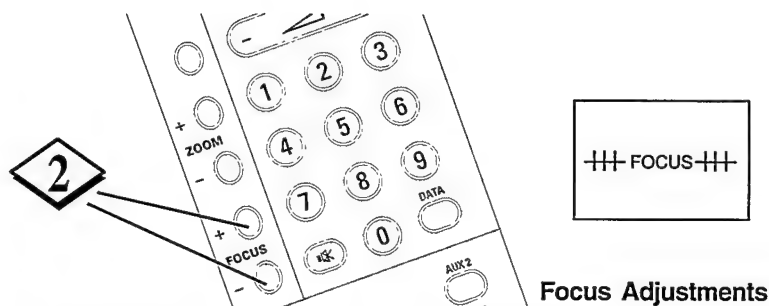
2 Press one of the focus buttons on the remote so that you see the word "FOCUS" on the screen. Press the focus buttons until the word is as sharp as possible. This is the best focus.



Remember. The zoom and focus functions on your remote can be disabled via the menu (See page 26).



Zoom Adjustments



Focus Adjustments

You make adjustments to your projected picture and sound using On-Screen Menus. To get them on your screen, first press the MENU button on your remote; you should then see this MAIN MENU. It is called a menu because, like in a restaurant, it lists the choices available to you. You will notice that the first item 1. AUDIO is highlighted. This means it is selected. The other available selections are white.

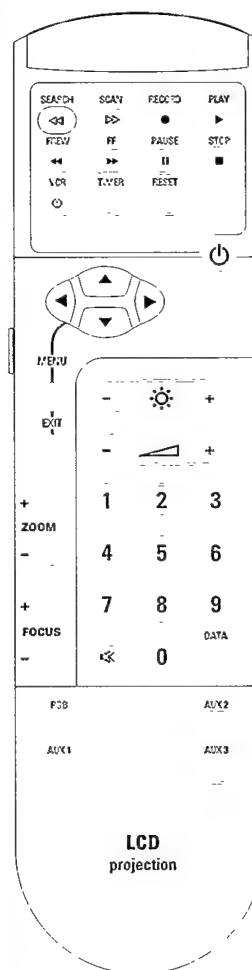
When you are switched to On-Screen Menu's the ▲ and ▼ buttons now let you step up and down through the menu choices. Try it. Press the ▼ button and watch how each menu item is highlighted in turn.

Now we'll try changing the treble sound (the high notes). Press MENU button to highlight "1. AUDIO". Then press the ► button to get a menu of all the choices available for adjusting the sound.

You should now see a picture like the one on the right here. Notice that there is a new element at the top of your picture. It has a solid blue bar. We will now make the blue bar longer and shorter to adjust the treble sound.

Press the ▼ button to highlight "2. TREBLE". You could also push a number button, in this case 2, to select treble in a direct manner. Then press the ► button and watch the blue bar get longer. Press the ◀ button to make the blue bar shorter. As you make these changes, you will hear the sound changing to give you more or less treble. The Projector is set in the factory to give the best general performance when the blue bar reaches the middle position as shown in our diagram. But you can adjust things to suit yourself. When you're happy with the treble sound you can adjust some other items in the same way if you wish. Most of the other menus work as described on the previous page except that you don't always have the blue bar; sometimes you get a choice of two or three items instead.

(Continued on next page)



Remote

## MAIN MENU Screen

### TELEVISION ADJUSTMENTS

1. AUDIO
2. VIDEO
3. PICTURE SELECT
4. DATA INPUT
5. FEATURES

1. BASS
2. TREBLE
3. BALANCE
4. STEREO
5. EXPAND

## BASS Adjustments

1. BASS
2. TREBLE
3. BALANCE
4. STEREO
5. EXPAND

## TREBLE Adjustments



## HOW TO USE ON SCREEN MENUS WITH REMOTE (CONTINUED)

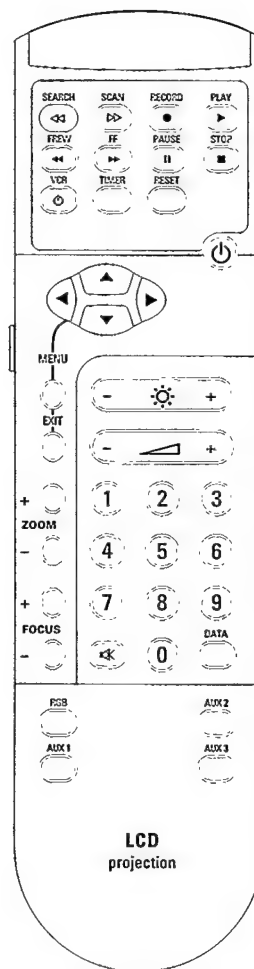
To try this out, press the ▼ button to highlight "4. STEREO". You should get a display like the one on the right here. Press the ◀ or ▶ button to highlight in turn MONO or STEREO.

You can get back to the MAIN MENU at any time by pressing MENU.  
You can also switch the On-Screen Displays OFF at any time by pressing the EXIT button.

EXTERNAL AUDIO SOURCE  
MONO **STEREO**

1. BASS
2. TREBLE
3. BALANCE
- 4. STEREO**
5. EXPAND

STEREO Screen



Remote

# AUDIO CONTROL ADJUSTMENTS WITH REMOTE

## TO SELECT AUDIO CONTROLS

**1** Press MENU button on the remote to show MAIN MENU.

**2** Press 1 on the remote to select AUDIO (on the MAIN MENU).

**3** Press number of the desired feature on the remote (See below).

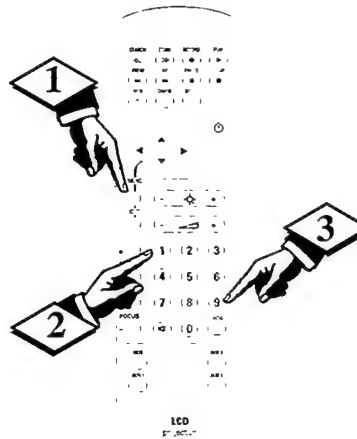


Remember. The highlighted item is ready for adjustment.

## MAIN MENU Screen

### TELEVISION ADJUSTMENTS

1. AUDIO
2. VIDEO
3. PICTURE SELECT
4. DATA INPUT
5. FEATURES



Remote

## 1. BASS 2. TREBLE 3. BALANCE

**B**yond the normal volume level controls, your Projector also has individual sound controls for BASS (low frequency), TREBLE (high frequency), and Speaker BALANCE sound.

### BEGIN

**1** With the AUDIO Menu displayed, press 1 for BASS, 2 for TREBLE, or 3 for BALANCE.

**2** Press the ◀ or ▶ button to adjust the sound to levels you prefer.

**3** Press the EXIT button to clear the screen.

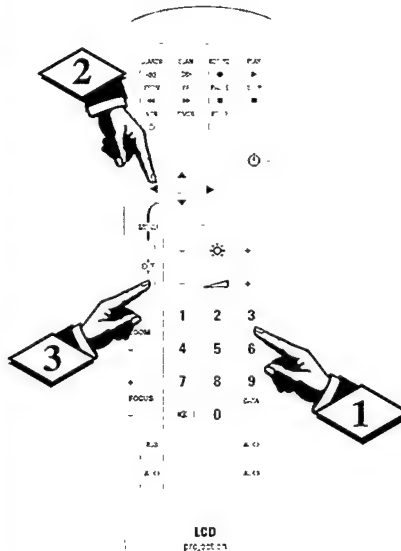


Go to next adjustment or remember, when the bar scale is centered, speaker BALANCE is centered between the Projector's right and left side speakers.

## AUDIO Screen: BASS Adjustment Selected



1. BASS
2. TREBLE
3. BALANCE
4. STEREO
5. EXPAND



Remote

## 4. STEREO

**Y**our Projector is equipped with an amplifier and twin-speaker connector to which external speakers can be connected to hear stereo sound.

### BEGIN

**1** With the AUDIO Menu displayed, press 4 for STEREO.

**2** Press the ◀ or ▶ button to place the Projector in the STEREO mode. The word STEREO is highlighted to confirm setting.

**3** Go to next adjustment or press the EXIT button to clear the screen

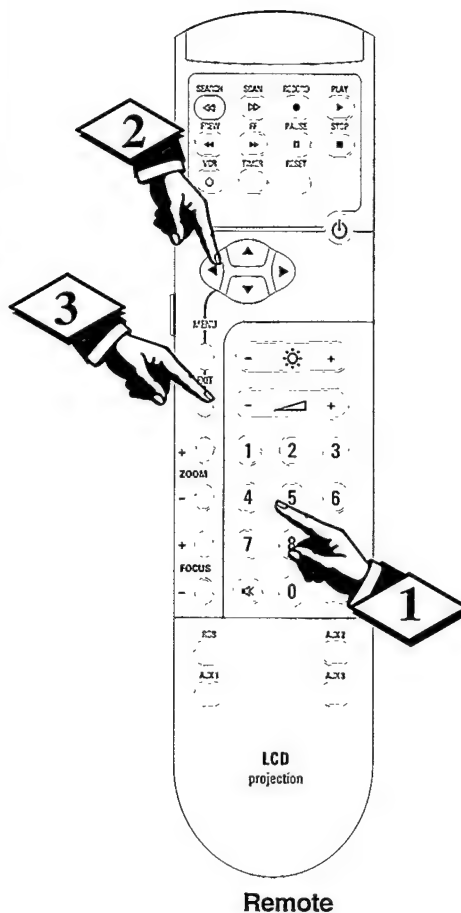


**Remember.** If a stereo signal is not available and the Projector is placed in the STEREO mode, sound from the Projector will remain monaural (mono).

EXTERNAL AUDIO SOURCE  
MONO **STEREO**

1. BASS
2. TREBLE
3. BALANCE
- 4. STEREO**
5. EXPAND

**AUDIO Screen:**  
**STEREO Adjustment Selected**



## 5. EXPAND

**E**xpanded sound can be used to add greater depth and dimension to both monaural (MONO) and STEREO sound.

### BEGIN

**1** With the AUDIO Menu displayed, press button 5 for EXPAND.

**2** Press the ◀ or ▶ button to place the Projector in the EXPAND sound mode.

The word "EXPANDED" is highlighted to confirm setting.

**3** Press the EXIT button to clear the screen.

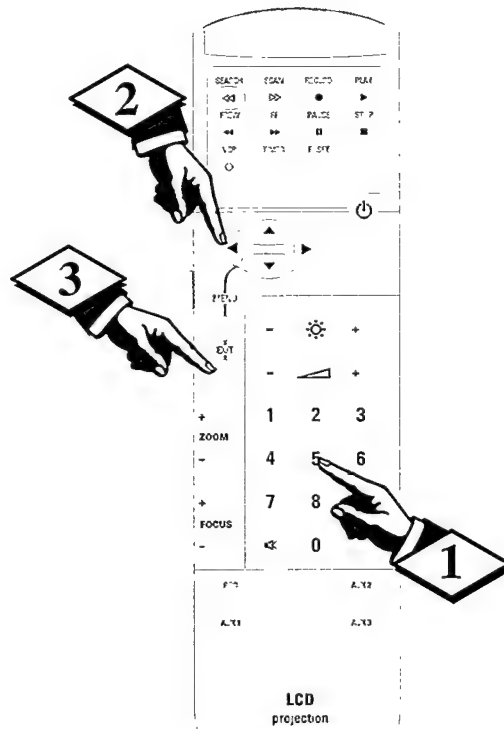


Remember. Under some nonstandard transmission conditions the stereo signal received by the Projector may be unsuitable for the EXPANDED mode. If this condition exists, you may still receive quality stereo (or mono) sound by turning the EXPAND mode OFF (set Projector to NORMAL). Expanded sound can only be heard with external speakers connected.

EXTERNAL AUDIO SOURCE  
NORMAL EXPANDED

1. BASS
2. TREBLE
3. BALANCE
4. STEREO
5. EXPAND

**AUDIO Screen:**  
**EXPANDED Sound Adjustment**  
**Selected**



Remote

# VIDEO CONTROL ADJUSTMENTS

## TO SELECT VIDEO CONTROLS

### BEGIN

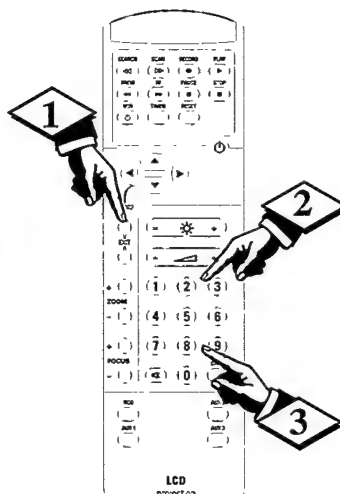
1 Press MENU button on the remote to show the main menu.

2 Press 2 on the remote to select VIDEO (on the main menu).

3 Press number of the desired feature on the remote.



Remember. The highlighted item is ready for adjustment.



Remote

## MAIN MENU Screen

### TELEVISION ADJUSTMENTS

1. AUDIO
2. VIDEO
3. PICTURE SELECT
4. DATA INPUT
5. FEATURES

## 1.BRIGHT 2.CONTRAST 3.COLOR 4.TINT 5.SHARP

To adjust your Projector color and picture controls, select a source and follow the steps shown below:

### BEGIN

1 Select BRIGHT, CONTRAST, COLOR, TINT, or SHARP picture control.

With the VIDEO Menu displayed, press 1 for BRIGHT, 2 for CONTRAST, etc.

2 Press the ◀ or ▶ button to adjust the selected control.

3 Press the EXIT button to clear the screen.



Remember, when the bar scale is centered, control settings are at normal mid-range levels.

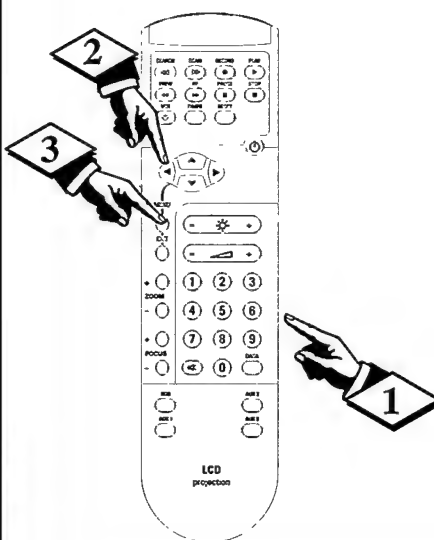
**BRIGHTNESS:** Press ◀ or ▶ to see more or less detail in dark scenes.

**CONTRAST:** Press ◀ or ▶ to adjust the white level.

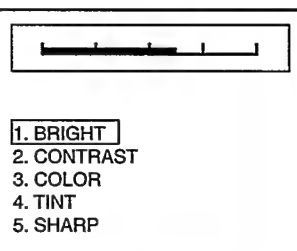
**COLOR:** Press ◀ or ▶ to add or eliminate color.

**TINT:** Press ◀ or ▶ to obtain natural skin tones. (Is not available in RGB)

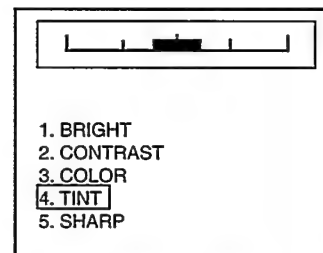
**SHARPNESS:** Press ◀ or ▶ to improve detail in the picture.



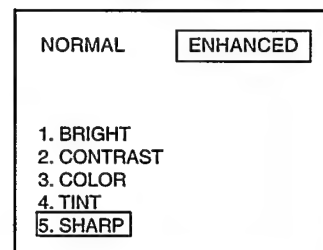
Remote



VIDEO Screen:  
BRIGHT Adjustment  
Selected  
(Also for PICTURE, COLOR)



VIDEO Screen:  
TINT Adjustment  
Selected




VIDEO Screen:  
SHARP Adjustment  
Selected

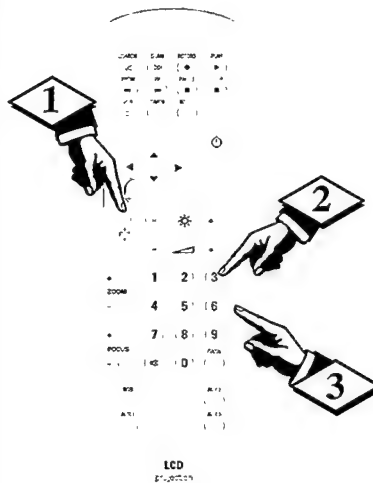
## TO SELECT PICTURE SELECT CONTROLS

**BEGIN**

- 1 Press the **MENU** button on the remote to show the main menu.
- 2 Press **3** on the remote to select **PICTURE SELECT** (on the main menu).
- 3 Press the **◀** or **▶** button of the desired feature on the remote to select the desired picture source.



 Remember. The highlighted item is ready for adjustment.



## Remote

### MAIN MENU Screen

## TELEVISION ADJUSTMENTS

1. AUDIO
2. VIDEO
3. PICTURE SELECT
4. DATA INPUT
5. FEATURES

## 3. PICTURE SELECT - AUX 1,2 and 3

The Projector's Picture Source controls allow you to use the INPUT jacks (Audio, Video and S(uper)-Video) located on the front and rear of the Projector. The Projector's INPUT jacks may be used for direct picture and sound connections with VCRs (or Video Disc Players, etc) that have their own Audio/Video OUTPUT jacks.

To view the playback of a VCR tape (or Video Disc) by using the Audio/Video jacks on the Projector:

### BEGIN

- 1 Connect the VIDEO OUT jack from the VCR (or CDV) to the AUX1 VIDEO IN jack on the Projector.
- 2 Connect the AUDIO OUT jacks R(ight) and L(ef) from the VCR to the AUX 1 AUDIO IN jacks on the Projector.
- 3 Select PICTURE SELECT control on the Projector.

With the MAIN Menu displayed, press 3 for PICTURE SELECT.

- 4 Press the ◀ or ▶ button to place the Projector in the AUX 1 mode.

"AUX 1" is highlighted to confirm the setting.

- 5 Press EXIT to clear screen.
- Turn the VCR (or CDV) ON and playback the tape (or disc) in a normal manner.



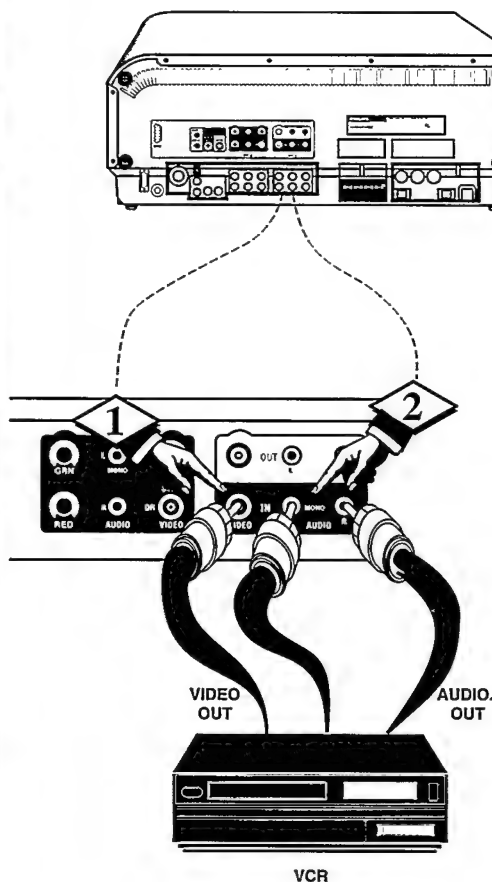
Connections and operation of the Projector's AUX 2 and 3 INPUT jacks are the same as those described for the AUX 1 jacks (except "AUX 2 or 3" is selected as the PICTURE SOURCE.)

### PICTURE SOURCE RGB

Connect RGB and SYNC to the AUX 2 inputs and select RGB as picture source. (The SYNC signal must be composite negative sync.)

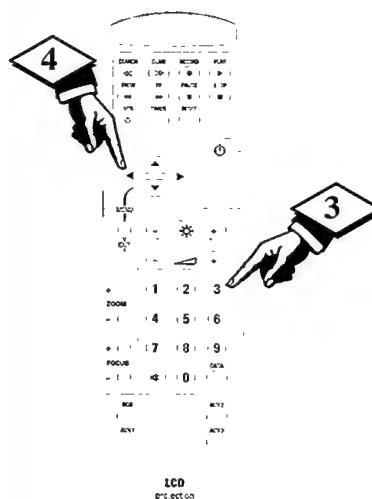
(Continued on next page)

## Back of Projector



### TELEVISION ADJUSTMENTS

1. AUDIO
2. VIDEO
3. PICTURE SELECT
4. DATA INPUT
5. FEATURES



### Remote

### AUX 1 AUX 2 AUX 3 RGB

### PICTURE SOURCE

### PICTURE SELECT Adjustment Selected

## 3. PICTURE SELECT - S-VIDEO

The S(uper)-VIDEO connection available on the rear of the Projector can result in far better picture clarity and detail, for the playback of VCR tapes or Video Discs, than the normal connections.

*Note: The VCR (or Compact Disc Player) must be equipped with a S-VIDEO OUT(put) jack in order to complete the connections shown on this page.*

### BEGIN

**1** Connect the S-VIDEO (or S-VHS) OUT jack from the VCR (or CDV) to the S-VIDEO IN jack on the Projector.

**2** Connect the AUDIO OUT jacks R(ight) and L(ef) from the VCR to the AUX 1 AUDIO IN jacks on the Projector.

**3** Select PICTURE SELECT control on the Projector.

With the MAIN Menu displayed, press 3 for PICTURE SELECT.

**4** Press the ◀ or ▶ button to place the Projector in the AUX 1 mode for S-VIDEO 1.

"AUX 1" is highlighted to confirm the setting.

**5** Turn the VCR (or CDV) ON and place it in the S-VIDEO (or S-VHS) playback mode. Insert S-VHS cassette tape and playback in a normal manner. Press EXIT to see: S-VIDEO.

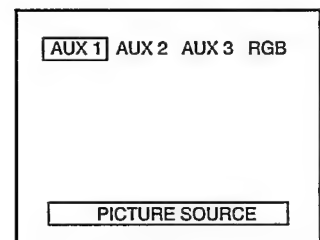
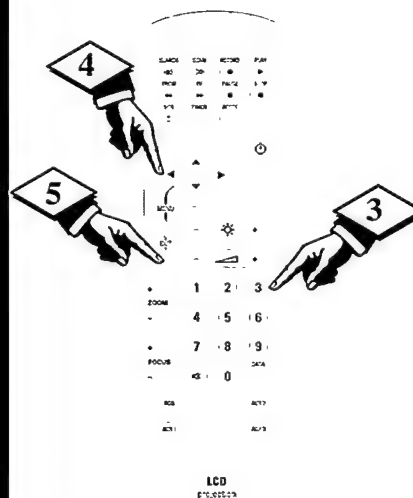
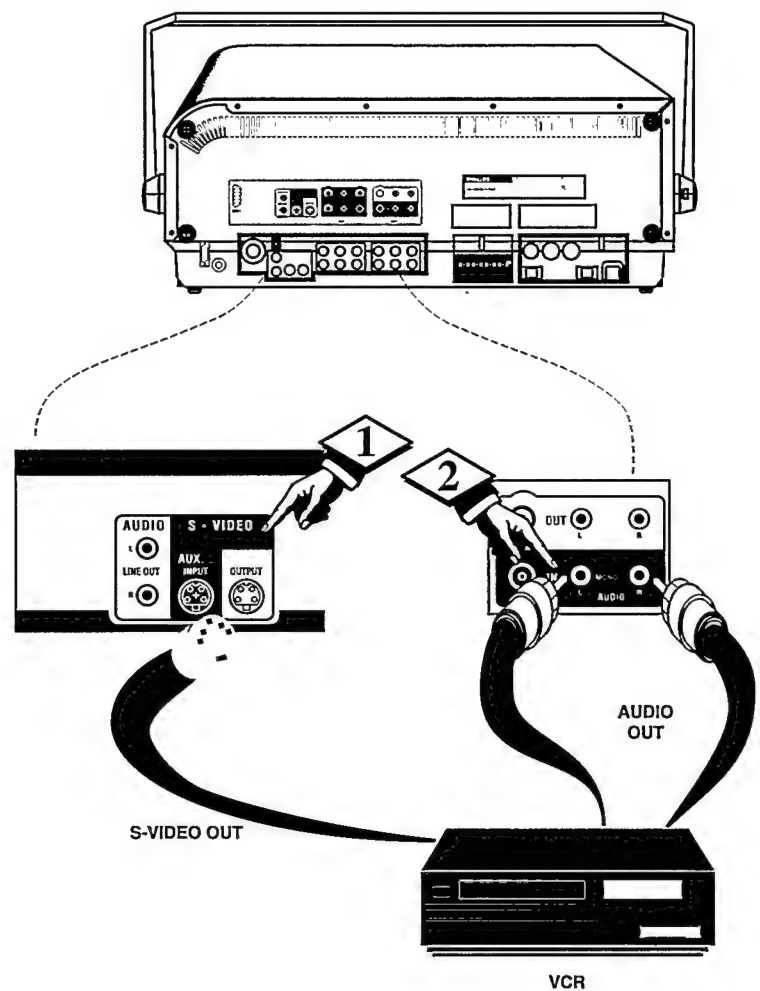


Remember. The S-VIDEO connecting cable will be supplied with the S-VHS VCR (or Compact Disc Player).

S-Video (or S-VHS) and audio can also be connected to the front panel jacks (AUX 3)

Do not connect simultaneously equipment to the S-VHS and VHS input.

Back of Projector



PICTURE SELECT Adjustment Selected

Remote



## TO SELECT DATA INPUT

1

Press the MENU button on the remote control to show the main menu.

2

Press 4 on the remote control to select DATA INPUT.

The menu disappears and the Projector is in the DATA mode.



Remember. To adjust the DATA MENU controls see pages 31 thru 34.

### TELEVISION ADJUSTMENTS

1. AUDIO
2. VIDEO
3. PICTURE SELECT
4. DATA INPUT
5. FEATURES

## TO SELECT FEATURE CONTROLS

### BEGIN

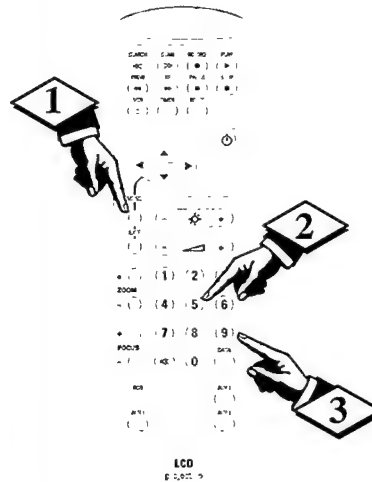
**1** Press MENU button on the remote to show MAIN MENU.

**2** Press 5 on the remote to select FEATURES (on the Main Menu).

**3** Press number of the desired feature on the remote.



Remember, the highlighted item is ready for adjustment.



Remote

### TELEVISION ADJUSTMENTS

1. AUDIO
2. VIDEO
3. PICTURE SELECT
4. DATA INPUT
5. FEATURES

MAIN Screen

PUSH TO MODIFY PRESET PICTURE CONTROLS

1. PERSONAL PREFERENCE
2. OPERATING HOURS TIMER
3. AUTOSTART
4. LENS CONTROL

FEATURES Screen

## 1. PERSONAL PREFERENCE

The Personal Preference button (located on the remote) will return the Projector to specific preset sources and their picture and audio level settings.

Four Personal Preference settings are available, so that the settings of each source can be stored (e.g. AUX 1 for VCR settings).

### BEGIN

**1** Select a source and adjust the audio and picture controls to settings you personally prefer (See pages 18-21).

**2** Press MENU.  
Press 5 (FEATURES).

With the FEATURES Menu displayed, press 1 for PERSONAL PREFERENCE.

**3** Press the ◀ or ▶ button to store the settings you have made in step <1>.

"SELECT P. PREF ITEM TO STORE TV SETTINGS" appears on screen. Four levels are available.

**4** Press the ▲ ▼ buttons on the remote to select one of the listed levels.

"P. PREF CAPTION" appears on screen.

**5** Press the ◀ or ▶ button if you want to change the CAPTION title for the selected P. PREF. level (e.g. "VCR" instead of AUX 1).

Press the ▲ ▼ buttons to move indicator to each new character space. Example Caption: VCR.

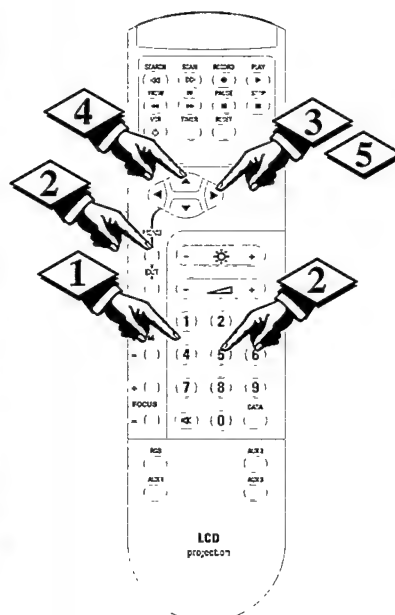
When the P. PREF. caption is complete, press the EXIT button to clear the screen.



PUSH **[+]** TO MODIFY  
PRESET PICTURE CONTROLS

1. PERSONAL PREFERENCE
2. OPERATING HOURS TIMER
3. AUTOSTART
4. LENS CONTROL

### FEATURES Screen



Remote

PUSH **[+]** TO STORE  
TV SETTINGS AS P. PREF.

1. P. PREF STORE
2. P. PREF MODIFY

SELECT P. PREF ITEM  
TO STORE TV SETTINGS

1. AUX 1
2. AUX 2
3. AUX 3
4. RGB

P. PREF      CAPTION  
1      VUX 1

### PERSONAL PREFERENCE Screen: 1. P. PREF. STORE Writing a name

(Continued on next page)

To recall the Personal Preference:

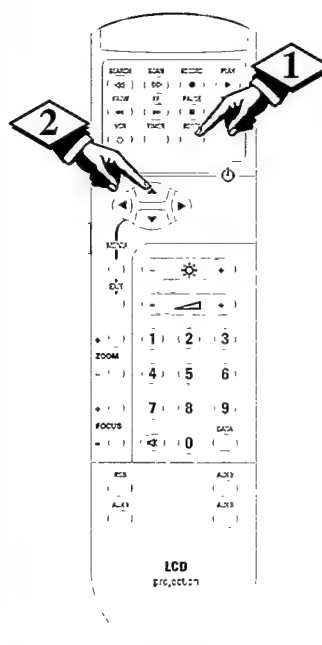
## BEGIN

- 1 Press RESET (Personal Preference) button on the remote.

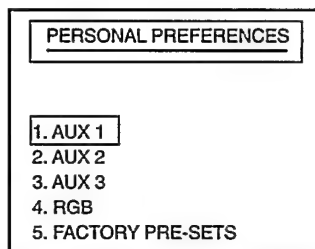
"PERSONAL PREFERENCES" list (with caption) appears on screen.

- 2 Press the ▲ ▼ buttons on the remote to select one of the listed personal preference levels.

Source, picture and audio settings will change to the preset levels you selected in the set-up procedure on the previous page.



Remote



PERSONAL PREFERENCE select

**P**REF(erence). MODIFY is available to quickly make changes to any existing P. PREF. setting.

## BEGIN

- 1 Press MENU.  
Press 5 (FEATURES).  
Press 1 (PERSONAL PREFERENCE).

With the P. PREF Menu displayed, press 2 for P. PREF MODIFY.

"SELECT P.PREF ITEM FOR MODIFICATION" appears on screen.

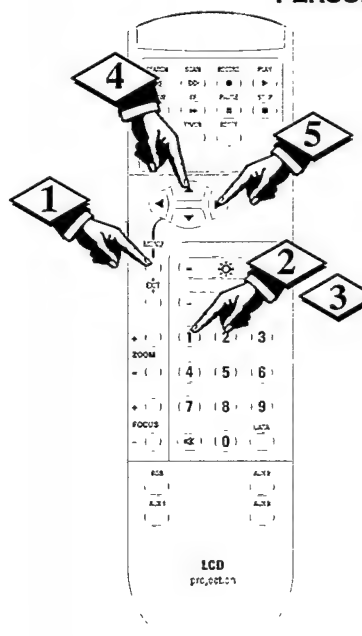
- 2 Select desired P. PREF from list.  
Example: press 1 for AUX 1.

- 3 Press 1 on the remote.

"P. PREF CAPTION" appears on screen.

- 4 Press the ▲ ▼ buttons to select the desired adjustment item.

- 5 Press the ◀ ▶ button to adjust the highlighted item.

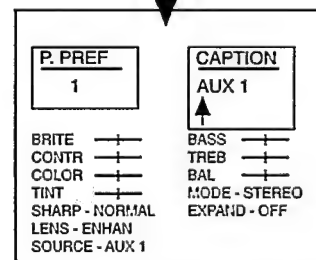
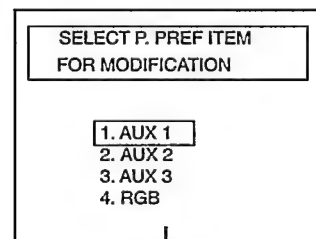


Remote

PUSH **+** TO MODIFY  
PREVIOUS P. PREF. SETTINGS

- 1.P. PREF STORE
- 2.P. PREF MODIFY

PERSONAL PREFERENCE Screen



PERSONAL PREFERENCE Screen: 2. P. PREF MODIFY Adjustment

## 3. AUTOSTART

*If the Projector is turned on with the main switch and autostart is activated, the Projector will start with the main picture connected to the last selected source.*

### BEGIN

1

Select AUTOSTART control.

With the FEATURES menu displayed press 3 for AUTOSTART.

2

Press the ◀ or ▶ button to turn the function ON or OFF.



PUSH TO TURN  
AUTOSTART ON OR OFF

1. PERSONAL PREFERENCE
2. OPERATING HOURS TIMER
3. AUTOSTART
4. LENS CONTROL

## 4. LENS CONTROL WITH REMOTE

### ZOOM

**Y**ou use the zoom controls to make the picture on the screen larger or smaller.

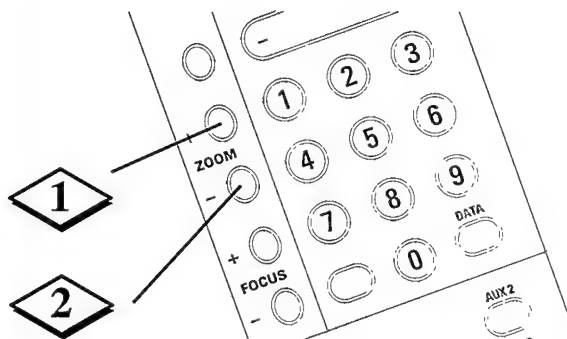
You **ENABLE** or **DISABLE** the controls, using the **LENS CONTROL** menu.

**BEGIN**

**1** Press the **ZOOM +** button to make the picture larger.

**2** Press the **ZOOM -** button to make the picture smaller.

Note: The word **ZOOM** appears on screen when using these controls.



+++ ZOOM +++

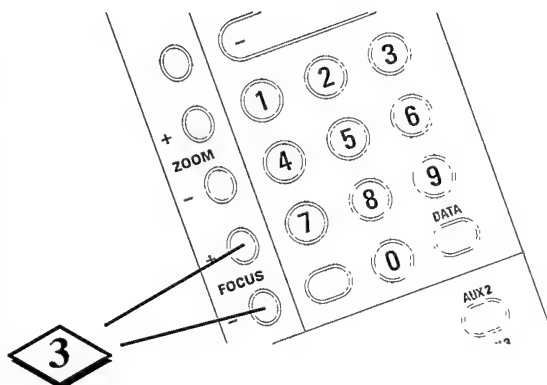
### FOCUS

**A**s you make the picture larger or smaller, it may appear fuzzy. You use the **Focus -** and **Focus +** buttons to focus.

**BEGIN**

**3** Press the **FOCUS -** and **+** buttons until the picture is sharp.

Note: The word **FOCUS** appears on screen when using these controls. Adjust the control so that the word **FOCUS** is sharp.



+++ FOCUS +++

Note: The message **ZOOM** or **FOCUS** only appears on screen if no menu is activated.

## 1. IMAGE - PHASE, BRIGHTNESS, CONTRAST

Beyond the normal picture levels, you can also control the image of projected computer pictures.

To adjust these settings, the Projector must be in the DATA mode (See page 29).

### BEGIN

**1** With the DATA mode selected press M(enu) on the remote.

The DATA MENU appears on screen.

**2** With the DATA MENU selected press 1 for IMAGE.

The first ring-menu (PHASE) appears on screen.

The PHASE adjustment can be used to optimize the picture performance of the DATA picture.

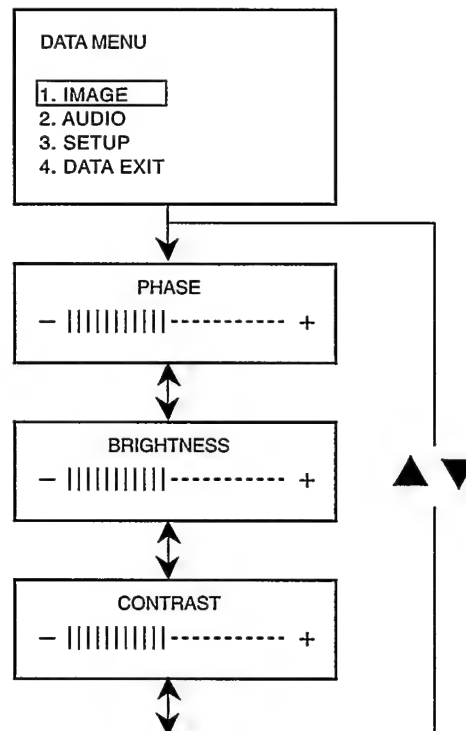
**3** Press the ▲ ▼ buttons on the remote to select another ring-menu displayed (BRIGHTNESS or CONTRAST).

**4** Press the ◀ ▶ button to adjust the setting of the ring-menu displayed.

**5** Press MENU again to return to the DATA MENU.



Remember. When the bar scale is centered, control settings are at normal mid-range levels.



## 2. AUDIO - BASS, TREBLE, BALANCE, SOUND, MODE, EXPAND

**B**eyond the normal audio levels, you can also control the sound of projected computer pictures.

To adjust these settings, the Projector must be in the DATA mode (See page 25).

### BEGIN

**1** With the DATA mode selected press **MENU** on the remote.

The DATA MENU appears on screen.

**2** With the DATA MENU selected press **2** for AUDIO.

The first ring-menu (BASS) appears on screen.

**3** Press the **▲ ▼** buttons on the remote to select another ring-menu displayed (TREBLE, BALANCE, SOUND MODE or EXPAND).

**4** Press the **◀ ▶** button to adjust the setting of the ring-menu displayed.

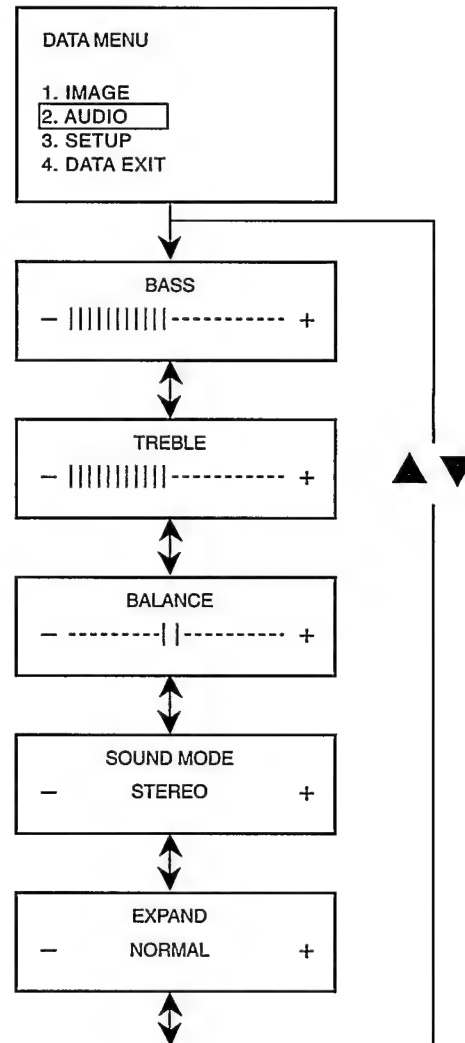
**5** Press **MENU** again to return to the DATA MENU.



Remember. When the bar scale is centered, control settings are at normal mid-range levels.

**SOUND MODE:** Press the **◀ ▶** button to select MONO or STEREO.

**EXPAND:** Press the **◀ ▶** button to select NORMAL or EXPANDED sound.





## 3.SETUP - HOR. POSITION, VERT. POSITION, PERSONAL PREFERENCE, CURTAIN, COMPUTER IDENT.

To adjust the setup of the computer image displayed, the Projector must be in the DATA mode (See page 25).

### BEGIN

- 1 With the DATA mode selected press MENU on the remote. The DATA MENU appears on screen.
- 2 With the DATA MENU selected press 3 for SETUP. The first ring-menu (HOR(izontal). POSITION) appears on screen.
- 3 Press the ▲ ▼ buttons on the remote to select another ring-menu displayed (VERT(ical). POSITION, PERSONAL PREFERENCE, CURTAIN or COMPUTER IDENT(ification).).
- 4 Press the ◀ ▶ button to adjust the setting of the ring-menu displayed.
- 5 Press MENU again to return to the DATA MENU.

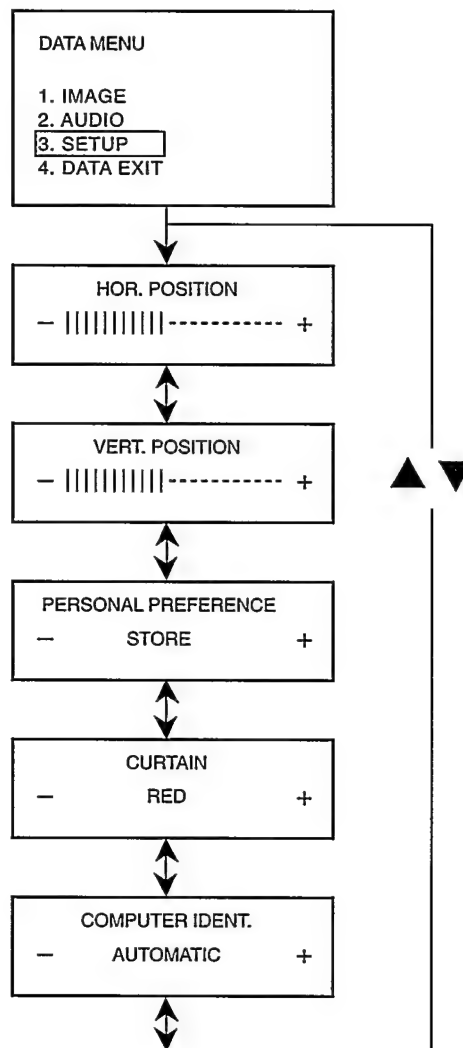


Remember. When the bar scale is centered, control settings are at normal mid-range levels.

**PERSONAL PREFERENCE:** After pressing the ◀ or ▶ button the current setting for the DATA mode will be stored. The text "VALUES STORED" will be displayed briefly.

**CURTAIN:** Press ◀ or ▶ to change the curtain color. The following colors can be selected: red, green blue, yellow, magenta, cyan, white and black.

**COMPUTER IDENT.:** The projector is able to automatically identify the connected type of computer signal. However, if the connected computer signal does not match the known signal standards, automatic identification can be overruled. Press the ◀ or ▶ button to select AUTOMATIC, VGA 480, VGA 400, VGA 350 or MAC-II.



## 4. DATA EXIT

**A**s long as the Projector is in the DATA mode, only the DATA MENU items can be selected and adjusted.

To return to the normal mode, you have to exit the DATA mode first.

### BEGIN

**1** With the DATA mode selected press the MENU on the remote. The DATA MENU appears on the screen.

**2** With the DATA MENU selected press 4 for DATA EXIT.



### DATA MENU

1. IMAGE
2. AUDIO
3. SETUP
4. DATA EXIT

## TIMER

**H**ave you ever forgotten to turn off the Projector and found it the next day with a test pattern screeching in your ears? Well, your Projector can save you all that trouble by automatically turning itself off.

### BEGIN

**1** Press the **TIMER** button on the remote.

"TIMER - 0:00" appears on screen.

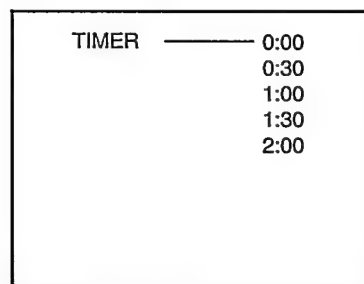
**2** Press the **TIMER** button repeatedly to select the amount of time before the Projector will turn OFF.

**3** Press the **EXIT** button to clear the screen.

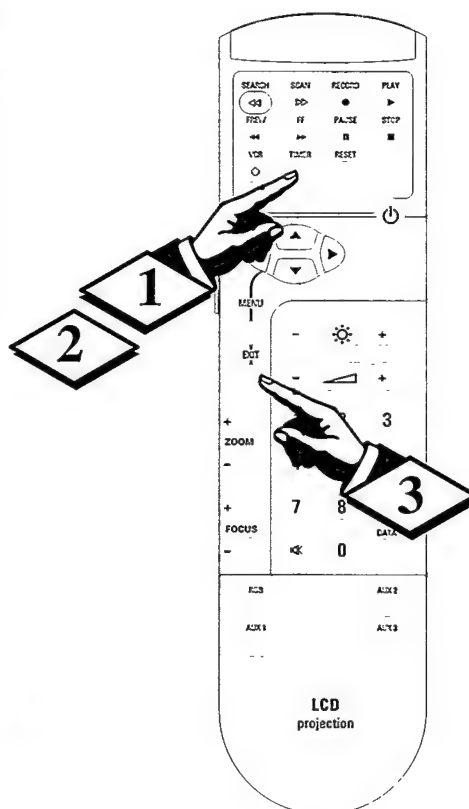


**Remember.** If you ever want to see how many minutes are left before the Projector shuts off, reselect the **TIMER** display.

If you ever want to stop a **TIMER** setting, reset the timer to 0:00 (or you could just turn the Projector off and then back on to cancel a setting).



TIMER Screen



Remote

## CLOSING/OPENING THE CURTAIN

**Y**ou can use the curtain control to blank the displayed computer picture. The screen will be blanked in the color selected (See page 33). This option can be useful when there is a waiting time between changing computer screens.

The Projector must be in the DATA mode (See page 25).

### BEGIN

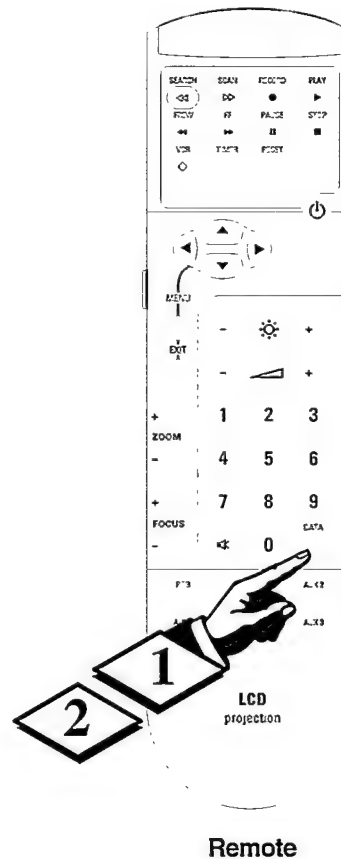
**1** With the DATA mode activated, press button DATA on the remote.

The screen is blanked and the curtain is closed in the selected color.

**2** Press the button DATA again (or any other button on the remote) to open the curtain again.



Remember, the curtain function cannot be used if a source other than DATA has been selected.

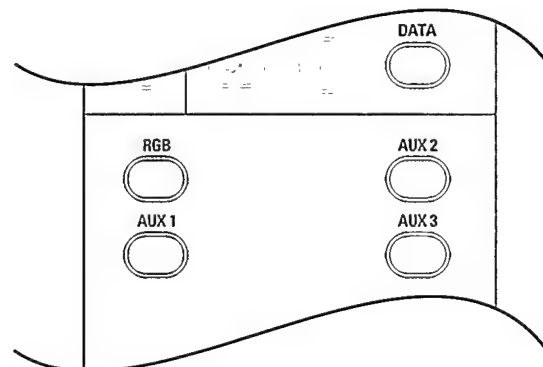


Remote

## DIRECT ACCESS

**T**he keys provide direct access of external input sources. E.g. press AUX 1 to select external input source AUX 1, DATA to select DATA INPUT mode, etc.

Note: The direct access controls are not available when a menu is activated.



## REPLACING THE LAMP

**T**he lamp used as the light source in your Projector will eventually have to be replaced. Shortly after 6,000 hours of viewing, you will see a warning display on your screen:

FOR BEST PERFORMANCE  
PLEASE REPLACE LAMP.  
RESET OPERATING HOURS TIMER

When you see this warning, the lamp should be replaced as soon as possible to restore brightness and to avoid sudden burn-out.

### BEGIN

**1** Switch off your Projector and unplug the power line.

**2** Wait for the lamp to cool. **THIS IS IMPORTANT.** In operation the lamp runs very hot. You can burn yourself severely if you handle the lamp when it is hot.

**3** Give the screw on the lid a quarter turn to the left and lift the lid.

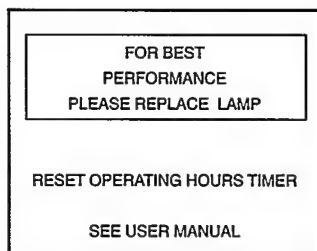
**4** Remove the 2 screws fixing the lamp. Take the spare lamp out of the box and remove the plastic bag. Pull the lamp connector from its base by moving it to the left. Remove the old lamp house by pulling it by the top and lift out the old lamp. Discard it by putting it in the trash can. **DO NOT PUT IT IN A FIRE.**

**5** Insert the new lamp house. Push the lamp connector onto its base until you feel a slight 'click'.



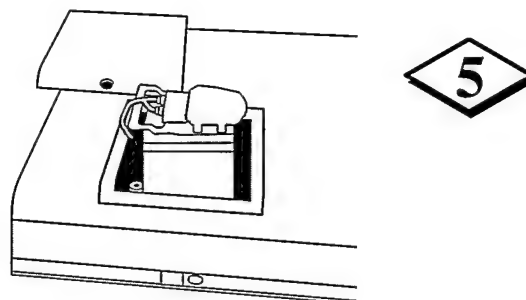
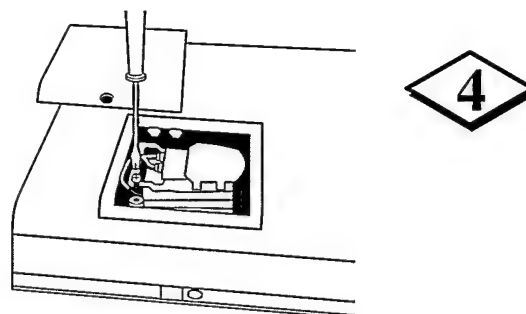
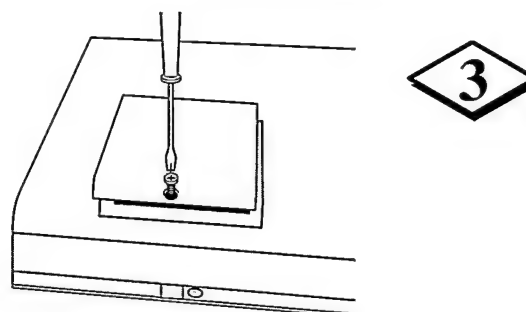
### Important

Do not forget to fix the anti-interference wire with the screw after replacing the lamp house.



LAMP Screen

Top of Projector

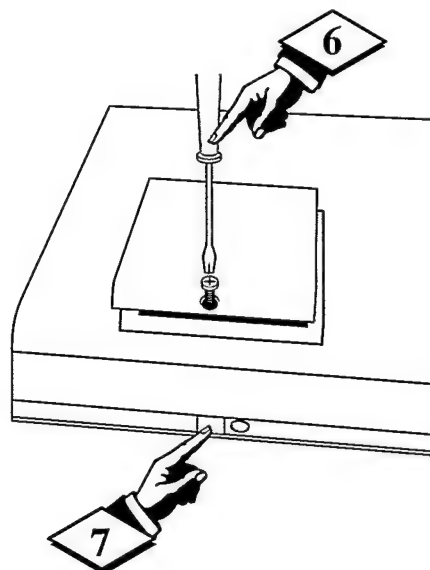


(Continued on next page)

**6** Replace the lid by pushing it back in its original position.  
Fix the lid by giving the screw a quarter turn to the right.

**7** Plug in the power line and press the ON switch.

Note: If some lamps on the front blink continuously, the lid has not been placed back properly into position.



## OPERATING HOURS TIMER

After replacing the lamp, you must reset the operating hours timer.

### BEGIN

**1** Press MENU (local or remote) to show MAIN MENU.

**2** Press 5 on the remote to select FEATURES (on the MAIN Menu).

**3** Press 2 on the remote to select OPERATING HOURS TIMER .  
Press 2 on the remote to select RESET OPERATING HOURS.

**4** Press ► to reset OPERATING HOURS.

**5** You will see the operating hours screen with 0000 HRS.

**6** Press the EXIT button to return to normal viewing.

PUSH **[+]** TO VIEW OR RESET  
OPERATING HOURS TIMER

1. PERSONAL PREFERENCE
2. OPERATING HOURS TIMER
3. AUTOSTART
4. LENS CONTROL

FEATURES Screen

1253 HOURS

1. OPERATING HOURS
2. RESET OPERATING HOURS

OPERATING HOURS TIMER  
MENU Screen

PUSH **[+]** TO RESET  
OPERATING HOURS

1. OPERATING HOURS
2. RESET OPERATING HOURS

0000 HOURS

1. OPERATING HOURS
2. RESET OPERATING HOURS

**P**lease make these simple checks before calling for service. These tips can save you time and money since charges for Projector installation and adjustment of customer controls are not covered under your warranty.

## NO POWER

## NO PICTURE

## NO SOUND

## REMOTE DOES NOT WORK

## YOU CAN'T 'ESCAPE' FROM A MENU

## WRONG MENU APPEARS

## THE ERROR LED BLINKS ALL THE TIME and MESSAGE "REPLACE PROJECTION LAMP"

## THE ERROR LED AND ONE OR TWO OTHER LEDS BLINKS ALL THE TIME (See page 5)

## SET DOES NOT START IMMEDIATELY

This Projector is equipped with protective circuitry that shuts the Projector OFF in case of moderate power surges. Should this occur turn the Projector back ON by pressing the POWER ON/STAND BY button, or unplug and then replug the power cord at the AC outlet.

This feature is not designed to prevent damage due to high voltage, such as lightning, which is not covered by your warranty.

Check the Projector power cord. Unplug the Projector, wait 2 minutes, then reinsert plug into outlet and push POWER button again.

Check main power switch on back of Projector.

Check if the front grill is mounted properly.

Check PICTURE SELECT display for correct position. Using the VCR/AUX position without a signal source will result in a blank screen.

Check the VOLUME buttons.

Check the MUTE button on the remote control.

Check the INT.(ERNAL)/EXT.(ERNAL) speaker switch on the rear of the Projector. EXT. position cuts sound of the Projector's internal speakers off.

Check battery.

Clean the remote and the remote sensor window on the Projector .

Press EXIT on the remote control. If that doesn't work, press the POWER OFF switch on the back of the Projector and immediately SWITCH ON again.

If the DATA menu appears, go to page 34 for instructions on how to exit DATA mode.

If the MAIN menu appears, go to page 25 for instructions on how to enter and control DATA mode adjustments.

The lamp needs changing.

Go to page 37 for instructions on how to do this.

There is a problem inside the set.

Don't try to fix it yourself; call your dealer for help.

Maybe the set 'ran' too hot. Check if ventilation slots are blocked.

Check if the lid for the lamp compartment is closed properly.

If you try to restart the set a short time after switching it off, it is possible that the lamp does not turn on immediately. In this situation the POWER button light blinks. The set will restart automatically within a few minutes.

If the set does not restart within 2 minutes, it will switch off and the error LED starts blinking. Wait until the blinking has stopped and switch on the set again.

If the set does not start within 2 minutes, replace the lamp.

If the set still does not start, please contact your dealer.

## Optical display system

Projector using metal halide gas discharge projection lamp source in an optical system with three liquid crystal panels and a combination of folding and dichroic mirrors.

## Liquid Crystal Panels

Panel size: 2.8 inch diagonally

Display system: transmission type liquid crystal panels

Drive system: TFD-R (Thin Film Diode-reset) active matrix

## LCD resolution

640 lines, 480 columns

## Color

16.8 million colors

## Horizontal scan rate

15.6, 31.4 - 36 kHz  
(video, VGA, MAC-II)

## Lens

F = 4.5, zoom lens with  
range f = 150 to 300 mm

Image size (mid-range magnification)

40 inch wide at 13 feet from screen

140 inch wide at 43 feet from screen

## Lamp

Ultra High Pressure lamp

100 W

## Remote Control

IR with a Projector-VCR switch and buttons for VCR power, Projector power, mute, volume up and down, brightness up and down, SEARCH/SCAN, record, play, stop, pause, fast forward/rewind, timer, reset (per. pref. set.), exit, ◀, ▶, menu, zoom -, zoom +, focus -, focus +, 10-digit keypad.

## Inputs

Two S-video, two composite video and one RGB/composite video and 15 pin Sub-D data graphic.

## Outputs

Selected source - S-video (loop from AUX 1 or 3), video and stereo audio, no video output from RGB.

## External speaker connections

Stereo - spring-loaded clips

## Internal audio amplifier

2 x 10 watts for external speakers

1 x 10 watts for internal speaker

## Internal speaker

One 3 1/3 inch

## Audio frequency response

Speaker connectors 40 Hz to 16 kHz,  
line out 40 Hz to 16 kHz.

## Special features

1/4-inch headphone jack, four personal preference menu settings for picture and audio, front panel inputs, mirror button for adjusting picture for front projection, rear projection or via mirror systems, remote control of zoom and focus.

## Rated voltage

100 to 140 V AC

## Rated frequency

60 Hz

## Power consumption

190 W average, 220 W peak

## Working temperature

41°F to 95°F (5°C to 35°C)

## Casing

Metal

## External dimensions

8 x 22 x 15 inches (200 x 554 x 390 mm)

## Weight

Approx 48 lbs (22 kg)

## Accessories included

Remote Control

Battery (9v)

Lens cap

Users manual

Safety Tips leaflet

Warranty

VGA cable



**Display \*** An on-screen message or graphics that help the user operate and adjust his Projector feature controls. See On Screen Displays (OSD).

**Direct Audio/Video Inputs/Outputs \*** Located on the rear of the Projector these connectors (RCA phono type plug) are used for the input or output of audio and video signals.

Designed for use with VCRs (or other accessories) in order to receive higher picture resolution and offer a variety of sound connection options.

**Focus\*** Adjusting the sharpness of the picture by changing the lens setting.

**LCD Liquid Crystal Display \*** A new type of screen display which is used instead of the conventional cathode ray tube. In this Projector, the picture is formed on LCD displays inside the projection unit and then projected onto a screen like a slide or movie. (see How Your Projector Works on page 4)

**Menu \*** An on-screen listing of feature controls shown on the Projection screen that are made available for user adjustments.

**On Screen Displays (OSD) \*** Refers to the wording or messages generated by the projector to help the user with specific feature controls (control adjustment, programming etc.)

**Remote Sensor Window \*** A window or opening on the Projector control panel through which infrared remote control command signals are received.

**Status \*** Allows the user to quickly confirm what input source is currently being viewed. Status can also be used to clear the Projector of on screen displays or information (rather than waiting for the displays to 'time out' or automatically disappear from the screen).

**S-VHS or S-Video\*** A higher quality version of the VHS standard for videorecorders and other devices, such as CD-I players.

**VCR (Video Cassette Recorder)\*** Device for playing pre-recorded video cassette tapes. Can also be used to record pictures and sound from an external source.

**Zoom\*** Changing the size of the picture by changing the lens settings.

# LIMITED WARRANTY

## LIMITED WARRANTY PROJECTOR

One (1) Year Free Carry-In Service Labor Warranty

Six (6) Month Exchange Warranty Projector Lamp

One (1) Year Exchange Warranty Parts

For purchases outside the U.S., see applicable warranty from country of purchase.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

### Parts and Labor

For one year (six months for the Projector Lamp) after installation, a Philips Factory Service Center (see below) will repair any product defect and replace any defective part without charge to you for parts or labor.

### What the Purchaser Must Do

Before you call for service, check your operating instruction booklet. A slight adjustment of the customer controls discussed in your instruction booklet may save you a service call.

### How to get Warranty Service

Due to the sophisticated nature of this product warranty service will be provided by a Philips Factory Service Center. If you feel you require warranty service, or need to discuss a problem about your LCD Projector, please contact the Philips Factory Service Center, listed below. If it is determined that the Projector needs to be repaired, you will be given a return authorization number. Carefully pack the LCD Projector in secure packaging for safe shipment.

Be sure that you retain the carton and all packing materials from this unit. These materials are specifically designed for shipping this product.

Deliver or ship the Projector freight prepaid and insured to the Factory Service Center.

Philips Factory Service Center  
5164 Blazer Parkway  
Dublin, OH 43017  
(614) 792-1495

**YOU MUST PRESENT PROOF OF THE DATE ON WHICH THE LCD PROJECTOR TV WAS FIRST PURCHASED (SALES RECEIPT OR OTHER EVIDENCE) WHEN REQUESTING SERVICE OR REPLACEMENT PART WARRANTY PERFORMANCE.**

Also please include a description of the problem when returning product for repair. Following warranty repair, the unit will be returned to you freight prepaid. Be sure to include your complete return address on the outside of the carton.

### Warranty Exclusions

Your Warranty Does Not Cover:

Labor charges for Projector installation or set-up, adjustment of customer or preference controls, and installation or repair of antenna systems outside the Projector.

Product repair and/or part replacement because of misuse, accident, unauthorized repair or other cause not within the control of Philips Consumer Electronics Company.

Reception problems caused by signal conditions or cable or antenna systems outside the Projector.

A Projector purchased, used or serviced outside the U.S.A. Puerto Rico and the Virgin Islands.

Incidental or consequential damages resulting from the product. Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you.

**ALL IMPLIED WARRANTIES INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THIS EXPRESS WARRANTY.** Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

### IMPORTANT REMINDER

PLEASE FILL OUT AND MAIL YOUR WARRANTY REGISTRATION CARD PROMPTLY. IT WILL BE EASIER FOR US TO NOTIFY YOU IF IT SHOULD EVER BE REQUIRED.

### How to get Warranty Service After the Warranty Expires

Out of warranty service can be obtained under the following arrangements:

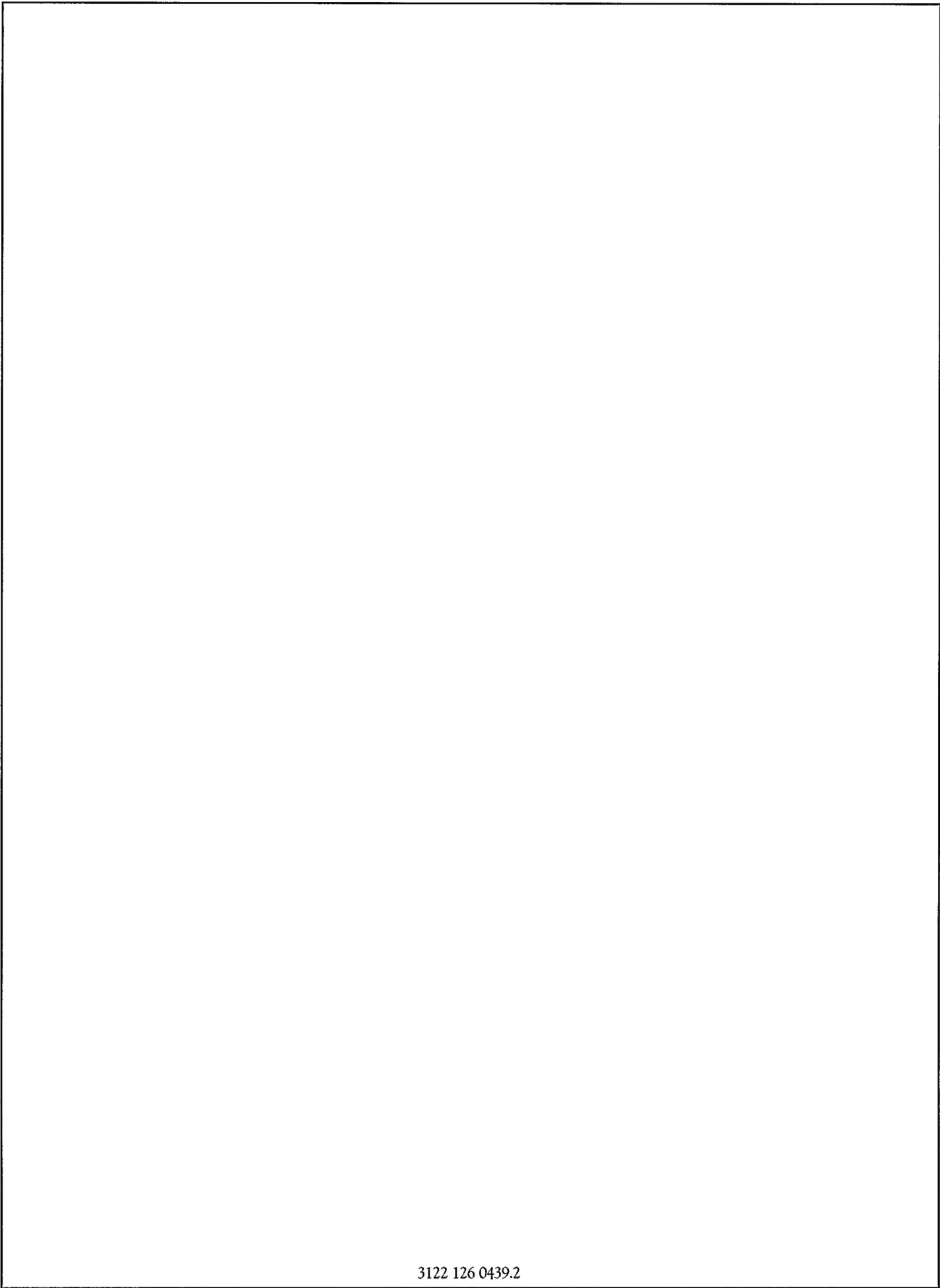
- Contact the Philips Factory Service Center at (614) 792-1495 to obtain service.
- Pack your product in a safe carton for shipment.
- Mail the product to the Philips Factory Service Center listed in 'How to Get Warranty Service'. Also include a letter inside the carton describing the problem and listing your name, address and phone number.

Please write your model and Serial numbers below. The numbers are located on the back of your unit. Please remember to have these numbers on hand any time you call.

MODEL NO. \_\_\_\_\_  
SERIAL NO. \_\_\_\_\_

PHILIPS SERVICE COMPANY  
P.O. BOX 555 • JEFFERSON CITY, TENNESSEE 37760  
(615) 475-8869





3122 126 0439.2